

ACCELERATED LEARNING OPTIONS:

Moving the Needle on Access and Success

A Study of State and Institutional
Policies and Practices

June 2006



Supported by a grant from
Lumina Foundation for Education

WICHE



The Western Interstate Commission for Higher Education (WICHE) is an interstate compact created by formal legislative action of the states and the U.S. Congress. Its mission is to work collaboratively to expand educational access and excellence for all citizens of the West. Member states are:

Alaska	Idaho	Oregon
Arizona	Montana	South Dakota
California	Nevada	Utah
Colorado	New Mexico	Washington
Hawaii	North Dakota	Wyoming

WICHE's broad objectives are to:

- Strengthen educational opportunities for students through expanded access to programs.
- Assist policymakers in dealing with higher education and human resource issues through research and analysis.
- Foster cooperative planning, especially that which targets the sharing of resources.

This publication was prepared by the Policy Analysis and Research unit, which is involved in the research, analysis, and reporting of information on public policy issues of concern in the WICHE states.

This report is available free of charge online at http://www.wiche.edu/Policy/Accelerated_Learning/reports.asp.

For additional inquiries, please contact the Policy Analysis and Research unit at (303) 541-0254 or ebarber@wiche.edu.

Copyright © June 2006 by the
Western Interstate Commission for Higher Education
P.O. Box 9752
Boulder, Colorado 80301-9752
Telephone: (303) 541-0200
An Affirmative Action/Equal Opportunity Employer
Printed in the United States of America
Publication Number 2A358

Table of Contents

List of Figures	ii
List of Tables	iii
Acknowledgements	v
Executive Summary	vii
Chapter 1 - Introduction	1
Chapter 2 - The State Policy Landscape	7
Chapter 3 - Policies and Practices at Postsecondary Institutions	25
Chapter 4 - Follow the Students	37
Chapter 5 - The View from Inside: Students Discuss Accelerated Learning	47
Chapter 6 - Financing Accelerated Learning Options: Understanding Who Benefits and Who Pays	57
Chapter 7 - Policy Implications	73
Author Biographies	83
References	85
Appendices	
Appendix A - A Review of the Literature	91
Appendix B - A State-Level Policy Audit	99
Appendix C - Postsecondary Institutional Policies and Practices	139
Appendix D - Methodology and Findings from Transcript Analysis	165
Appendix E - Methodology for Focus Group Study	179

List of Figures

Figure	Page
4.1 Florida high school graduates who participated in AP, dual/concurrent enrollment, and/or IB, by year of graduation	38
4.2 Students who were enrolled at Florida postsecondary institutions immediately after graduating from high school	39
4.3 Students who were continuously enrolled for two or more consecutive academic years	39
4.4 Students who completed postsecondary degrees	39
4.5 Students who completed associate's and bachelor's degrees, by time to degree	40
C.1 Written policies, by institutional control.....	141
C.2 Advanced Placement policy and practice, by control and institutional type.....	141
C.3 Advanced Placement policy and practice, by size and region	141
C.4 Dual/concurrent enrollment policy and practice, by control and institutional type.....	142
C.5 Dual/concurrent enrollment policy and practice, by size and region	142
C.6 Tech-Prep policy and practice, by control and institutional type	142
C.7 Tech-Prep policy and practice, by size and region.....	143
C.8 International Baccalaureate policy and practice, by control and institutional type	143
C.9 International Baccalaureate policy and practice, by size and region.....	143
C.10 Who determines accelerated learning admissions policy, by control	143
C.11 Who determines accelerated learning admissions policy, by region	144
C.12 Who determines how accelerated learning credit is treated for admissions purposes, by region	145
C.13 Responsibility for determining how accelerated learning credit applies, by control and institutional type	145
C.14 Responsibility for determining how accelerated learning credit applies, by size	146
C.15 Responsibility for determining how accelerated learning credit applies, by region	146
C.16 Minimum requirements for dual/concurrent enrollment, by control	147
C.17 Minimum requirements for dual/concurrent enrollment, by control and institutional type.....	147
C.18 Minimum requirements for dual/concurrent enrollment, by size	147
C.19 Minimum requirements for dual/concurrent enrollment, by region	148
C.20 Accelerated learning options enhance admissions prospects, by control and institutional type.....	148
C.21 Admissions preference given for Advanced Placement, based on performance standards by control and institutional type	149
C.22 Variation in authority for determining how accelerated learning credit applies, by control and institutional type	149
C.23 When students are informed that accelerated learning credit is accepted/applied, by control.....	150
C.24 When students are informed that accelerated learning credit is accepted/applied, by control and institutional type	150
C.25 When students are informed that accelerated learning credit is accepted/applied, by size.....	151
C.26 When students are informed that accelerated learning credit is accepted/applied, by region.....	151
C.27 Share of institutions granting elective or required credit for Advanced Placement and dual/concurrent options, by control and institutional type	152
C.28 Share of institutions granting elective or required credit for accelerated learning, by size	152
C.29 Share of institutions granting elective or required credit for accelerated learning, by region	152
C.30 Share of institutions granting elective or required credit for Tech-Prep and International Baccalaureate options, by control and institutional type	152

Figure	Page
C.31	Acceptance of International Baccalaureate courses, by control and institutional type 153
C.32	How accelerated learning credit appears on transcripts, by control and institutional type 153
C.33	Existence of accelerated learning outreach programs, by control, size, and region..... 154
C.34	Existence of accelerated learning outreach programs, by control and institutional type..... 154
C.35	Where dual/concurrent courses are taken, by control, institutional type, size, and region 155
C.36	Where Tech-Prep courses are taken, by control, institutional type, size, and region 155
C.37	Financial assistance for accelerated learning options, by control 156
D.1	Florida high school graduates who participated in AP, dual/concurrent enrollment, and/or IB, 1997 to 2003 168
D.2	Postsecondary credits awarded to AP and IB participants, all Florida cohorts 170

List of Tables

Table	Page
2.1	Summary of state-level policies related to accelerated learning, 2005 8
2.2	Eligibility for participation in dual/concurrent enrollment as defined in state policy 12
2.3	Application of course credit with respect to dual/concurrent enrollment 13
2.4	Who pays for participation in dual/concurrent enrollment programs? 15
2.5	Information sharing and counseling regarding dual/concurrent enrollment..... 16
3.1	Does the institution have written policies concerning the acceptance of accelerated learning options? 25
3.2	Does the institution consider any accelerated learning option for purposes of admission and/or credit requirements? 26
3.3	Who determines the accelerated learning admissions policy? 26
3.4	Who determines how accelerated learning credit is treated in the admissions process?..... 27
3.5	Who decides how accelerated learning credit will apply?..... 27
3.6	Does the institution have minimum requirements for a high school student to participate in dual/concurrent enrollment programs? 28
3.7	Beyond adding weight to a student’s high school GPA, does evidence of participation in any accelerated learning option enhance a student’s chance for admission? 29
3.8	Does the institution give preference for admissions purposes to a student who took AP and met certain standards? 30
3.9	When is a student with accelerated learning credit informed that the credit is accepted by the institution? 31
3.10	Does the institution grant elective or required college credit for accelerated learning options? 31
3.11	Does the institution accept an International Baccalaureate diploma as equivalent to any college-level work?..... 31
3.12	Does the institution have an outreach program to notify students, particularly those from low-income, disadvantaged backgrounds, about opportunities for accelerated learning options? 32
3.13	Does the institution provide financial assistance specifically targeted for high school students from low-income, disadvantaged backgrounds who enroll in accelerated learning options?..... 34
4.1	Participation in accelerated learning options 38
4.2	Participation in accelerated learning options, by income group 41
4.3	Participation in accelerated learning options, by race/ethnicity 41
4.4	Students who enrolled immediately following high school graduation, by income and race/ethnicity 42
4.5	Students who enrolled in remedial courses, by income and race/ethnicity..... 42
4.6	Students who were continuously enrolled for two or more consecutive academic years, by income group and race/ethnicity..... 43

Table	Page
4.7	Students who completed postsecondary degrees, by income group and race/ethnicity 43
6.1	Critical questions asked by stakeholders involved in accelerated learning options 59
6.2	Enrollment and percent changes in Washington’s Running Start and College in High School 64
C.1	Share of all institutions reporting accelerated learning written policies and/or engaging in accelerated learning practice 141
C.2	Who determines accelerated learning admissions policy, by institutional type 144
C.3	Who decides how accelerated learning credit is treated in the admissions process, all institutions 144
C.4	Who decides how accelerated learning credit is treated in the admissions process, by institutional type 144
C.5	Who decides how accelerated learning credit will apply, all institutions, by institutional control 145
C.6	The chances of accelerated learning options enhancing admissions prospects, all institutions, by control 148
C.7	Admissions preference associated with Advanced Placement performance standards, all institutions, by control 149
C.8	Variation in the authority for determining how accelerated learning credit applies, by control 149
C.9	When accelerated learning is accepted and applied, all institutions 150
C.10	Share of all institutions that report granting elective or required credit for accelerated learning options, by control 151
C.11	Acceptance of International Baccalaureate courses, by control 153
C.12	How accelerated learning appears on transcripts, all institutions, by control 153
C.13	Financial assistance for accelerated learning options, all institutions 155
D.1	Selected characteristics of Florida cohorts, 1997-2003 167
D.2	Participation in accelerated learning options, all Florida cohorts 168
D.3	Number and percent of students who enrolled at postsecondary institutions in Florida immediately after graduating from high school, by type of accelerated learning option, all Florida cohorts 169
D.4	Two years of continuous enrollment, by type of accelerated learning option, selected Florida cohorts 169
D.5	Postsecondary degree completion by type of accelerated learning option, selected Florida cohorts 169
D.6	Students requiring remedial courses in postsecondary education, selected Florida cohorts 169
D.7	Time between high school graduation and completion of an associate’s degree, selected Florida cohorts 170
D.8	Time between high school graduation and completion of a bachelor’s degree, selected Florida cohorts 170
D.9a	Immediate enrollment by accelerated learning option and income group, all Florida cohorts 171
D.9b	Immediate enrollment by accelerated learning option and race/ethnicity, all Florida cohorts 171
D.10a	Enrollment in remedial courses by income group, selected Florida cohorts 172
D.10b	Enrollment in remedial courses by race/ethnicity, selected Florida cohorts 172
D.11a	Continuous enrollment by accelerated learning option and income group, selected Florida cohorts 173
D.11b	Continuous enrollment by accelerated learning option and race/ethnicity, selected Florida cohorts 173
D.12a	Degree completion by accelerated learning option and income group, selected Florida cohorts 174
D.12b	Degree completion by accelerated learning option and race/ethnicity, selected Florida cohorts 174
D.13a	Time between high school graduation and associate’s degree completion by income group, selected Florida cohorts 175
D.13b	Time between high school graduation and associate’s degree completion by race/ethnicity, selected Florida cohorts 175
D.14a	Time between high school graduation and bachelor’s degree completion by income group, selected Florida cohorts 176
D.14b	Time between high school graduation and bachelor’s degree completion by race/ethnicity, selected Florida cohorts 176

Acknowledgements

This report was made possible by a generous grant from Lumina Foundation for Education. The Western Interstate Commission for Higher Education (WICHE) is grateful for the foundation's commitment to increasing access and success for all students and its interest in accelerated learning as a potential strategy to do that.

Accelerated Learning Options: Moving the Needle on Access and Success was prepared by staff of WICHE's Policy Analysis and Research unit and several consultants:

Amy Berk Anderson, senior associate, Augenblick, Palaich and Associates

Cheryl D. Blanco, senior program director, WICHE

Steven Farkas, consultant, FDR Group

John Immerwahr, consultant, associate vice president for academic affairs, Villanova University

Demarée K. Michelau, project coordinator, WICHE

John L. Myers, vice president, Argenblick, Palaich and Associates

Robert Palaich, senior partner and vice president, Augenblick, Palaich and Associates

Brian T. Prescott, research associate, WICHE

Colleen O. Sathre, consultant, vice president emeritus for planning and policy at the University of Hawai'i

Jennifer Sharp Silverstein, consultant, Augenblick, Palaich and Associates

Three information collection activities conducted for this report required assistance from others. We express our appreciation to the many individuals in state higher education executive offices and state education agencies for providing valuable information for the state-level policy audit. Also, we could not have performed the transcript analysis without

the assistance of Jeff Sellers, director of the K-20 Education Data Warehouse, and Kathy Peck and Dawn Feiss, also with the Florida Department of Education, who made data from the data warehouse available. While we cannot identify the schools and postsecondary institutions that enabled us to conduct student focus groups on their campuses, we gratefully acknowledge the extra effort that school administrators made to recruit students and provide the facilities for our interviews during the normal school day. And we extend special recognition to the more than 60 students, teachers, and counselors who shared their time and reflections with us.

In addition, we convey our appreciation to the members of the study's expert review panel, who were very generous with their time and provided thoughtful comments on drafts of the report:

Sharmila Basu Conger, policy analyst, State Higher Education Executive Officers

Melinda Mechur Karp, research associate, Community College Research Center, Teachers College, Columbia University

Paul Lingenfelter, president, State Higher Education Executive Officers

Lynn Morrison-Hamilton, regent, Montana University System, Board of Regents

Roberta Richards, WICHE commissioner, educational specialist, Hawaii Department of Education

Jeff Sellers, director, K-20 Education Data Warehouse, Florida Department of Education

Finally, special recognition goes to WICHE staff members Erin Barber (administrative assistant), Candy Allen (graphic designer), and Annie Finnigan (editor), for their exceptional efforts to assist the authors in the numerous details of moving the study to publication.

Executive Summary

Accelerated Learning Options: Moving the Needle on Access and Success was designed to inform members of the policy, education, and research communities about existing state and institutional policies and practices associated with four accelerated learning programs: Advanced Placement (AP), dual/concurrent enrollment, the International Baccalaureate (IB) Diploma Program, and Tech-Prep. This effort was part of a larger interest in examining issues of effectiveness, quality, financing, and availability in order to determine if accelerated learning was a viable option to increase access to and success in postsecondary education among low-income and underrepresented students. The study was supported by a generous grant from Lumina Foundation for Education.

Accelerated learning courses and programs are popular and show promise in improving student preparation for college-level work. Although the evidence supporting the role of accelerated learning in increasing access and success is tenuous and causal relations are uncertain, these options are related to higher rates of college enrollment, persistence, and graduation. This study concludes that much can be done to improve selected aspects of the programs and lead to greater effectiveness for students and states. Until all states and school districts require a rigorous academic curriculum for all students, accelerated learning options may be the only alternatives that provide consistently more challenging courses and the opportunity to earn college credit while in high school. For this reason alone, it is imperative that issues of quality, research, availability, and financing be addressed by policymakers, researchers, and practitioners.

Information collection and analysis for *Moving the Needle on Access and Success* drew on a range of activities, including an audit of current state policies, a survey of postsecondary institutions, an analysis of high school graduates' transcripts, student focus groups, a review of the literature, an examination of state financing approaches, and an expert panel. The recommendations that emerged from this study are intended to draw attention to compelling and unresolved issues related to the offering of accelerated learning options and to encourage policymakers, researchers, practitioners, and external funding groups to work together on efforts to ensure that all students enjoy the advantages offered by accelerated learning programs and courses.

Research and Data

New national data provide a general picture of selected aspects of some accelerated learning options, and

studies that target specific states give a sense of isolated and individual situations. A significant gap persists, however: there is no data set that provides state-by-state information in a form that can be monitored and analyzed regularly in a comparative manner for trends, strengths, and weaknesses. While a number of states gather information on accelerated learning programs, that information is rarely collected and disaggregated in a manner that allows for analysis by income level. Absent that kind of detail, it is impossible to know the extent to which low-income students benefit from these opportunities.

To complement state-level assessments of accelerated learning programs, comprehensive evidence-based research is needed to determine if there is a causal relationship between participation in accelerated learning courses and access to and success in college. Research on accelerated options should be particularly attentive to how patterns of participation and related outcomes differ, based on income and race/ethnicity.

Recommendations

- A national effort is needed to establish consistency in collecting, analyzing, and reporting data across states on student participation in accelerated learning options. The logical agent to lead this effort is the National Center for Education Statistics.
- Through legislation, lawmakers should require their state departments of education, state higher education executive offices, and postsecondary institutions to collaborate in the design, collection, analysis, and reporting of data that will provide the essential elements to examine student participation in accelerated learning options.
- The research community should collaborate with the federal government, state departments of education, and postsecondary education to design and conduct studies that will provide the evidence-based research needed to help policymakers and others understand the effectiveness of accelerated learning options on access and success for all students.
- Philanthropic organizations, state governments, and the federal government should commit sufficient resources to support a robust and targeted research agenda on accelerated learning options, including longitudinal cohort studies that can track students through secondary school and into higher education and the workforce.

Broadening Participation

A concerted effort is needed at the state and federal levels to equalize access to accelerated programs. It is especially critical to ensure that students from economically disadvantaged, historically underrepresented, and rural populations have an equivalent opportunity to benefit from these programs, especially in terms of their academic preparation for college and their ability to compete in the admission process. The benefits of accelerated learning may differ importantly, based on students' income and race/ethnicity.

The economics of school finance and the realities of state budgets do not support a recommendation that all public high schools in the nation should provide equal access to multiple accelerated learning options. Nonetheless, it may be feasible for all schools to offer some type of accelerated learning program. With the widespread availability of technology, it may not be necessary to have an AP, dual/concurrent enrollment, IB, or Tech-Prep teacher in every school, when the courses can often be offered online with adequate support services. Broadening participation is also highly dependent on students and their families receiving clear, timely, and appropriate information about the options available to them.

Recommendations

- Through legislation, lawmakers should encourage their state department of education, state higher education systems, and individual institutions to collaborate to ensure that students in all high schools in the state have access to at least one of the major accelerated learning options.
- States and local school boards should modify high school graduation requirements to ensure that all students have the option of completing at least one course offered as an accelerated learning option.
- State law should require that schools ensure that students in grades nine through 12 and their parents have accurate, timely, and appropriate information and counseling on each of the accelerated learning options available through the school. Postsecondary institutions, system offices, and state higher education executive offices should also assist, where appropriate, with dissemination of information on accelerated learning options.

The opportunity to enroll in accelerated courses is part of the solution; resources to cover the multiple costs are another part. Students from economically disadvantaged families are most vulnerable to being left out of accelerated learning programs if direct costs, such as those for tuition, books, transportation, and materials are not covered by the school district, state, or other entity.

Recommendations

- Through legislation, federal and state policymakers should encourage schools and school districts to establish policy and outreach programs that target at-risk students and provide alternatives for them to participate in accelerated learning options.
- The federal government, states, school districts, and postsecondary institutions should assess their financing policies and endorse a funding approach that allows economically disadvantaged students to participate in accelerated learning options at no cost to themselves or their families.

Broadening access also means that states as well as secondary schools and postsecondary institutions may need to reexamine their policies regarding participation criteria. Participation requirements in any form can be a two-edged sword. On the one hand, they help identify students who have a track record of academic achievement to succeed in more rigorous coursework. On the other hand, overly restrictive minimum requirements may prevent motivated students from attempting accelerated courses.

Recommendation

- State lawmakers and others, such as local and state boards of education, should examine policies for language that may limit access to, or participation in, accelerated learning options or provide a basis for anyone to discourage students from participating.

Financing and Financial Aid

The financing of accelerated learning options is a complex issue, with little specific information from states on funding levels, the sources of those dollars, and the distribution of dollars among programs or students. States should be expected to estimate expenses and determine cost savings or lack of savings associated with accelerated learning options for students and the state. Few states do this, however, and an important reason why may be the lack of incentive for anyone to take responsibility for this kind of reporting. In most states, no single agency or office is charged with performing this kind of follow up, with the exception of the auditor's office. States that have established P-20 committees or councils may be best positioned with the kind of collaborative structure necessary to collect, analyze, and report. In other states, existing statewide articulation committees may fill this role.

Recommendations

- States should identify an agency or office responsible for assessing the cost effectiveness of accelerated learning options for the state and for students and require periodic reporting from that agency.
- States should require annual reporting from their departments of education on how accelerated options are funded, the amount of the investment for each option, the sources of these funds, and the number of students served by each option. This fiscal information should be disaggregated by income level, gender, and race/ethnicity.
- The federal government and states should provide incentive funds to secondary schools and postsecondary institutions to support the greater investment needed to provide underrepresented and economically disadvantaged students with access to accelerated learning options.
- Philanthropic organizations and local communities should commit additional resources to outreach programs and other initiatives that make enrollment in accelerated learning options a recommendation for participation and that include evidence-based research with evaluation components on the efficacy of these initiatives for targeted populations.
- States should ensure that economically disadvantaged students do not incur expenses for participation in accelerated learning programs and the associated examinations.
- States should explore funding options that compensate both the public high school and the postsecondary institution, where applicable and necessary, for their costs related to the provision of an accelerated learning course.

Students who participate in accelerated learning programs may benefit monetarily in several ways. In addition to state and federal funding that supports direct program costs, other expenses, such as tuition, fees, books, materials, and transportation, may be underwritten by government funding mechanisms or external sources for economically disadvantaged students. Access to these resources may be the determining factor in making it possible for low-income students to take advantage of accelerated learning courses. Collaboration across education sectors and their communities should provide opportunities to explore creative ways to enhance financial aid for low-income students.

Recommendation

- In addition to gathering data on program funding, states, school districts, and postsecondary institutions should report how the state and students benefit from financial assistance in other forms, including coverage for books, tuition, fees, transportation, etc.

Postsecondary Credit for Accelerated Learning

There are important differences in how colleges and universities process accelerated credits, leading to confusion about what students think will happen to their credit and how institutions actually treat that credit once a student is enrolled in postsecondary education. Additionally, responsibility for deciding how accelerated learning credit will apply for the student's record is often dispersed among various offices in the institution. This does not appear to be a transparent process for the student, who may have much at stake.

For the protection of students' and states' investments and to take the guesswork out of the use of accelerated learning credits, there should be a guarantee that students who successfully complete accelerated options will be awarded credit at the state's postsecondary institutions. This credit should reduce the number of credits that students will be required to take at an institution to obtain a degree. This credit should reduce the number of credits that students will be required to take at an institution to obtain a degree. Articulation agreements might provide models for how states think about assuring students that their accelerated learning courses will be recognized and credited by postsecondary institutions.

Recommendations

- Through legislation, policymakers should provide assurances that students will receive credit at the state's public two- and four-year postsecondary institutions for each accelerated option that they successfully complete.
- Policy regarding the acceptance and application of accelerated learning credit at the postsecondary institutional level should be transparent to the student and ensure that the student is notified about how the accelerated credit will be applied prior to admission or when an offer of admission is extended.

Collaboration: K-12 and Higher Education

There is much room for expanding higher education's involvement with K-12 in supporting accelerated learning options, particularly on the part of baccalaureate/master's and research institutions. An important disconnect in the transition from high school to college is the assessment of student readiness for college-level work. This is an area where stronger linkages between K-12 and higher education through local- and state-level policymaking bodies can produce important breakthroughs in more effective co-use of assessment tests as students leave high school and enter higher education. Another area where stronger collaboration between K-12 and higher education is essential relates to the quality of accelerated learning options.

Recommendation

- State boards of education and state higher education executive offices should jointly develop, implement, and monitor statewide guidelines that address quality issues associated with accelerated learning options, including guidelines and benchmarks for performance expectations concerning the curriculum, faculty, materials, and assessments.

Chapter 1

Introduction

Cheryl D. Blanco

This study is about accelerated learning options, an array of activities designed to provide high school students with a more rigorous curriculum and possibly the opportunity to earn college credit while still in high school. These options take many forms, including: Advanced Placement (AP); dual/concurrent enrollment; Tech-Prep; the International Baccalaureate (IB) Diploma Program; early or middle college high schools; bridge programs; and the College Level Examination Program (CLEP). They are increasingly high-profile opportunities, primarily because they appear to provide benefits for students and their families, for secondary schools and postsecondary institutions, and for the state and its citizens. But policymakers and educators are also aware of potential problems. For example:

- Students must be prepared both academically and emotionally for college-level work, or the cost of failure may be substantial for them, their school, and their state.
- Funding decisions must be carefully designed and allow for program sustainability, or programs may be in jeopardy each year as annual appropriations are determined.
- Collaboration between K-12 and higher education must be strong to ensure that students in the programs have rich, rewarding, and authentic academic experiences.¹

There is general consensus in the literature concerning the reasons for the growing variety of accelerated learning programs and the increased interest in them.² For students, accelerated learning options generally provide a more rigorous curriculum than traditional high school courses, which improves their preparation and enhances their chances of succeeding in college. The appearance of accelerated credits on their high school transcript may give them an edge over other students during the college admissions process. In addition, students and families view these courses as a way to have a “college experience” or “test the waters” with minimal repercussions in case of lackluster performance. One of the options – dual or concurrent enrollment courses – when taught on the college campus, may improve persistence by helping establish a “bond” between student and institution, which fosters both social and academic integration.

For parents, the implicit, if not explicit, chance that their student will be better prepared is accompanied

by the possibility that their child will be able to finish an associate’s degree in less than two years or a bachelor’s degree in less than four years because the accelerated coursework taken while still in high school will decrease time to the degree. This is then supposed to translate into a less expensive college education through savings on a semester or two of tuition.

For institutions, accelerated coursework may be used as a screening tool and a measure of college readiness – applicants with AP, dual enrollment, or IB credit are perceived as having potential to do college-level work. The natural next step is for institutions to use accelerated learning opportunities as a recruiting tool to identify students more likely to succeed in college. “Some institutions of higher education can gain tuition money for student FTEs as funds follow the students. Some institutions of higher education perceive such programs as a means of recruiting more students and thus helping themselves as well as the students financially.”³

A state’s citizens benefit when their lawmakers make judicious use of state resources. When it comes to accelerated learning, policymakers have multiple interests: they want assurance that the state outlay for accelerated learning options is a good investment, that they “pay off” by decreasing time to degree for college students, and that they are equally available to as many students as possible. Additionally, policymakers want assurance that the state is not paying more than once for the accelerated coursework, unless policymakers consciously choose to double fund.

Monetary gain may be playing a significant role in the growth of accelerated learning options in another way. Respondents in an earlier project noted that there is “big money to be made from examinations and specialized instructional materials” associated with the programs that require examinations.⁴

In addition to a general interest in accelerated learning, there is a particular interest in examining how existing mechanisms – such as AP, dual/concurrent enrollment, IB, and Tech-Prep – might expand or inhibit access to higher education for historically underrepresented groups, such as students of color and economically disadvantaged students. Work from some national initiatives has been instrumental in raising the visibility on accelerated learning policy issues and institutional practices, as well as the availability of research. (See box on p. 2 for examples.)

National Research Related to Accelerated Learning Options

- Through its initiative *Double the Numbers, Jobs for the Future (JFF)* hopes to strengthen support for state and federal policies that can dramatically increase the number of low-income young people who enter and complete postsecondary education by identifying, assessing, and promoting new and promising approaches to increasing efficiencies and reducing inequities in secondary and postsecondary education attainment.
- The American Youth Policy Forum (AYPF), with support from Lumina Foundation for Education, is working on a compendium of research studies, reports, and evaluations related to secondary/postsecondary learning options, programs that link secondary schools with two- and four-year institutions of higher education that allow students to earn credit for college-level classes while they are in high school. This initiative is designed to help national, state, and local policymakers and practitioners better understand what secondary/postsecondary learning options exist, the various ways they are structured, and their impact on student outcomes.
- The Office of Vocational and Adult Education (OVAE), U.S. Department of Education, recently concluded a study of state-level policies and statutes that support (or inhibit) the development and implementation of credit-based transition programs (i.e., programs that allow high school students to take college-level classes and earn college credit while still in high school). The project focused on developing an explanation for how and why credit-based transition programs may support the secondary-to-postsecondary transition of middle- and low-achieving students.⁵
- A website, *Academic Pathways to Access and Student Success (APASS)*, has been constructed by the University of Illinois, Urbana-Champaign, with support from Lumina Foundation for Education, “to identify, examine, and disseminate information about new and emerging academic pathways that extend from high school to college and enhance college access for traditionally underserved students.”⁶ APASS defines these pathways broadly and includes among them: Advanced Placement (AP), bridge programs, College-Level Examination Program (CLEP), distance learning/virtual schools, dual credit/dual enrollment, early or middle college high schools, general educational development (GED) in college settings, International Baccalaureate (IB), and Tech-Prep. The APASS website displays state-by-state information on several accelerated options.

The increased attention to accelerated learning options is important because of their widespread availability and student participation and because they hold potential for improving access to and success in postsecondary education for traditionally underserved populations. Accelerated learning options usually engage high school students in college-level work, and research shows that participation in rigorous courses is a stronger predictor of success in college than test scores or grade point averages.⁷ But comprehensive, comparable, and timely information about accelerated options has been sparse. Because of a lack of a national source of information on dual credit courses at the high school level, the U.S. Department of Education’s National Center for Education Statistics (NCES) conducted a study to provide baseline information regarding the prevalence and characteristics of dual credit courses. The survey also collected information on two types of exam-based courses, Advanced Placement (AP) and International Baccalaureate (IB). NCES found that most public high schools offered dual credit and/or exam-based courses; in addition, over half (57 percent) of all Title IV degree-granting institutions had high school students taking courses for college credit within or outside of dual enrollment programs during the 2002–03 school year.⁸ Among public high schools that year, NCES estimated enrollments at 1.2 million for dual credit courses, 1.8 million for AP courses, and 165,000 for IB courses.⁹

Several factors were related to where certain accelerated learning options were offered and to whom. Overall, 71 percent of public high schools offered courses for dual credit, 67 percent offered AP courses, and 2 percent offered IB courses. School size made a difference: 82 percent of large schools offered courses for dual credit, while only 63 percent of small schools did. Similar results were found for schools offering AP: 97 percent of large schools offered AP courses, yet only 40 percent of small schools did. School location also made a difference. Schools located in either towns or urban fringe areas were more likely than schools in cities or rural areas to offer dual credit courses. Schools in urban fringe areas were far more likely to offer AP than their counterparts in cities, towns, or rural areas (87 percent, 77 percent, 72 percent, and 50 percent, respectively). Only a small proportion of schools in any area offered the IB program: 11 percent of those in towns, 6 percent of those in cities, and 4 percent of those in urban fringe areas.¹⁰

The influence of these options is multifaceted and touches many constituencies, involving nearly all sectors and levels of postsecondary institutions, as well as families, students, and policymakers. The sheer number of students utilizing accelerated options is significant. Additionally, the increasing mobility of

students among colleges and universities and across state lines adds a further dimension to the complex way that accelerated courses and programs can impact their access and success. The U.S. Department of Education reports that 40 percent of students who enrolled in postsecondary education for the first time in 1995-96 had attended more than one institution over a six-year period. Further, among first-time bachelor's degree recipients who graduated in 1999-2000, 59 percent had attended more than one institution.¹¹ When students enroll in accelerated programs as juniors or seniors in high school, they have little idea how that credit will move with them through their postsecondary experience.

A paucity of comprehensive data and analysis that relates participation in accelerated programs in high school to how well students fare in postsecondary education has limited our understanding of how public policy concerning these options can be directed to support student access and success. With the exception of descriptive reports provided by the College Board on AP courses and tests, there has been little information published on other forms of accelerated courses and programs. More importantly, there are few evaluative studies that look at policy issues, such as whether there is equity of opportunity for all students to take advantage of these options; whether these options are effective in increasing access and success for all students; and the fiscal efficacy of state and individual investment in these courses and programs.

Research and data collection on accelerated learning options are complicated by a lack of uniformity in definitions. For purposes of this study, the term "accelerated learning" is an umbrella descriptor for four major programs: the College Board's Advanced Placement program, dual/concurrent enrollment, International Baccalaureate, and Tech-Prep programs. Other researchers and their publications follow somewhat different definitions. Bruce Johnstone and Beth Del Genio used a typology based on three groups:

- **Examination-based:** Mastery is determined by a single examination (examples: AP, IB, and College-level Examination Program - CLEP).
- **School-based:** A single college or university initially grants its credit on its transcript to a course taught in the high school.
- **College-based:** High school students take courses taught by college faculty in the college venue, generally alongside regularly matriculated college students, by the same faculty.¹²

Clark studied dual-credit programs and developed four types, very similar to the Johnstone and Del Genio groups.¹³

- **Type 1, Exam Preparation** - Credit is obtained after completion of a course and passing an exam (examples: AP and IB).
- **Type II, School-based** - Credit is obtained and transcribed as if taken from college (examples: programs that are part of National Alliance of Concurrent Enrollment partnerships).
- **Type III, College-based** - Credit is obtained and transcribed as are other courses taken from college (examples: Running Start in Washington state, Postsecondary Options programs in Ohio and Minnesota).
- **Type IV, Career Preparation** - Credit may require further college faculty member review prior to being transcribed (examples: Tech-Prep and professional/technical courses offered as "college-in-high-school courses").

Clearly, there are many similarities in these later typologies. In this paper, the four accelerated learning options have been defined as:

- **Advanced Placement:** The College Board's AP program is a cooperative educational endeavor between secondary schools and colleges and universities that allows high school students to take college-level courses and national examinations developed by the College Board in a high school setting. If a student achieves a minimum score on these examinations, he or she may be awarded college credit, depending on the requirements of the postsecondary institution.
- **Dual/concurrent enrollment:** Dual/concurrent enrollment programs allow high school students to enroll in and earn credit for college-level coursework while they are still in high school.
- **International Baccalaureate:** A comprehensive two-year international pre-university course of study, available in English, French, and Spanish, that leads to examinations and an IB diploma. It generally allows students to fulfill the requirements of their national or state education systems; internationally mobile students are able to transfer from one diploma program school to another.
- **Tech-Prep:** A federally funded program that includes a combination of at least two years of secondary education and two years of postsecondary education in a nonduplicative, sequential course of study leading to an associate's or baccalaureate degree, or a postsecondary certificate, in a specific career field. Tech-Prep also includes in-service training for secondary teachers, postsecondary faculty, counselors, and administrators.

As noted above, in recent years a few national studies have been released that shed light on some of the basic questions of what these programs are, where they are, and who they serve. The majority of these works were published after the current study was underway and are referenced here, where appropriate. Of note are recent publications from Jobs for the Future; the Community College Research Center, Teachers College, Columbia University; and the U.S. Department of Education’s National Center for Education Statistics and Office of Vocational and Adult Education.

The research from each of these entities has expanded our understanding of policies and practices concerning accelerated learning options in new ways. The current study, conducted by the Western Interstate Commission for Higher Education (WICHE) and supported by a grant from Lumina Foundation for Education, complements this recent work and helps fill the knowledge gaps by looking at accelerated learning from various perspectives. *Accelerated Learning Options: Moving the Needle on Access and Success* sought to meet several objectives:

1. To identify individual state policies related to accelerated learning options and key characteristics of those policies, including similarities, differences, funding guidelines or requirements, directives related to K-12 and higher education collaboration, quality issues, faculty requirements, etc.
2. To identify institutional policies and practices related to accelerated learning options and the application of accelerated learning credit.
3. To analyze existing data on the types of accelerated options programs and the students who participate in them, including who they are; how, when, where, and why they participate; and what kinds of options they select.
4. To determine the student’s perspective on the value of these programs.
5. To analyze the cost effectiveness for students, institutions, and states of accelerated options, especially for low-income, first-generation, and underrepresented populations.
6. To present recommendations on effective policy and practice at the state and institutional level to enhance the participation and success of low-income and underrepresented students in accelerated learning programs.

Over an 18-month period, WICHE engaged in several activities to gather, analyze, synthesize, and evaluate policies and practices, including:

- Conducting a policy audit and analysis of the 50 states to identify state-level policies on accelerated options.
- Conducting a 50-state survey and analysis of policies and practices at public and private two- and four-year institutions.
- Collaborating with one state that has a comprehensive student unit record system in order to conduct a transcript analysis of students with credits from accelerated courses and their progression in college.
- Examining financing approaches in some states.
- Convening focus groups of high school and college students to explore their experiences with accelerated courses in high school and higher education.
- Convening a focus group of policymakers and researchers to discuss the findings of the report.
- Updating WICHE’s State Policy Inventory Database Online (SPIDO) with state policy information on accelerated learning options.

The findings from this project are intended to help guide policymakers and institutional leaders in K-12 and higher education on how to best channel limited resources for students. It is hoped that this information will also assist them in designing policies and practices that will more effectively broaden the opportunity for underrepresented students to participate in accelerated learning in order to be more competitive and enjoy the same kinds of college choices that more privileged students do.

The report is organized in chapters which summarize the major findings from five data collecting activities:

- **State Policy Inventory:** An analysis of the status of policies across the 50 states concerning Advanced Placement, dual/concurrent enrollment, the International Baccalaureate Diploma Program, and Tech-Prep.
- **Institutional Survey of Chief Academic Officers:** Results and analysis of an online survey of chief academic officers in public and private two- and four-year colleges and universities to identify institutional policies and practices related to the four accelerated learning options reviewed in this study.
- **Transcript Analysis:** An analysis of the secondary and postsecondary transcripts of Florida high school graduates to examine how accelerated learning options are related to postsecondary participation, persistence, degree completion, and time to degree for all students and for those from different racial/ethnic and income backgrounds.
- **Student Focus Groups:** Results of interviews with high school and college students to explore their perceptions of the value of accelerated learning

to them, reasons for participating (or not) in these options, and their expectations for how participation in accelerated learning will help them in college.

- **Financing Approaches:** An examination of finance practices used for accelerated learning with examples from several states and an explanation of how three approaches to cost-benefit analysis can be applied to answer critical financing questions.

The final chapter examines the findings from these activities in light of their implications for state policy. Extensive appendices contain additional data collected during the course of the study.

Endnotes

¹ Demarée Michelau, "Postsecondary Enrollment Options Programs," *State Legislative Report* (Denver, CO: National Conference of State Legislatures, 2001), 3-4.

² See works by Richard Clark (2001), Bruce Johnstone and Beth Del Genio (2000), Nancy Hoffman (2005), Nancy Hoffman and Amy Robins (2005), and Joe Nathan, Laura Accomando, and Debra Hare Fitzpatrick (2005), which are cited in the Reference List. Also see Academic Pathways to Access and Student Success (APASS) at <<http://www.apass.uiuc.edu>>.

³ Richard W. Clark, *Dual Credit: A Report of Progress and Policies that Offer High School Students College Credits* (Philadelphia, PA: The Pew Charitable Trusts, 2001), 27.

⁴ Clark, 27.

⁵ U.S. Department of Education, Office of Vocational and Adult Education, accessed on 1/30/06 at <<http://www.ed.gov/about/offices/list/ovae/pi/cclo/cbtrans/index.html>>.

⁶ Academic Pathways to Access and Student Success (APASS), accessed on 1/28/06 at <www.apass.uiuc.edu>.

⁷ Clifford Adelman, *The Toolbox Revisited: Paths to Degree Completion from High School through College* (Washington, D.C.: U.S. Department of Education, 2006), xviii.

⁸ Tiffany Waits, J. Carl Setzer, and Laurie Lewis, *Dual Credit and Exam-Based Courses in U.S. Public High Schools: 2002-03* (Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 2005); and Brian Kleiner and Laurie Lewis, *Dual Enrollment of High School Students at Postsecondary Institutions: 2002-03* (Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 2005).

⁹ Waits et al., *Dual Credit*. Percentages sum to more than 100 because schools could offer more than one type of course. If a student was enrolled in multiple courses, schools were instructed to count the student for each course in which he or she was enrolled. Thus, enrollments may include duplicated counts of students.

¹⁰ Too few instances in rural areas were reported to make a reliable estimate.

¹¹ Katharin Peter, Emily Forrest Cataldi, and C. Dennis Carroll, *The Road Less Traveled? Students Who Enroll in Multiple Institutions* (Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 2005), 9 and vii.

¹² Bruce D. Johnstone and Beth Del Genio, *College-Level Learning in High School: Purposes, Policies, and Practical Implications* (Buffalo, NY: Learning Productivity Network, University at Buffalo, Graduate School of Education, 2000), 3-6.

¹³ Clark, iv.

Chapter 2

The State Policy Landscape

Demarée K. Michelau

Introduction

The primary purpose of this chapter is to identify and analyze the similarities and differences between states' policies related to accelerated learning. Specifically, using a comprehensive audit undertaken by the Western Interstate Commission for Higher Education (WICHE), this chapter identifies state-level policies (as established by state statute or board rule through 2005) related to the College Board's Advanced Placement (AP) program, dual/concurrent enrollment, the International Baccalaureate (IB) Diploma Program, and Tech-Prep, both in terms of general trends and specific state activity. The chapter also analyzes the status of these policies and provides a limited discussion of the policy implications associated with the trends in accelerated learning policy in the states. A detailed explanation of how this audit was conducted, as well as state-by-state information, can be found in Appendix B.

Trends in the States

Although states may sometimes favor one particular approach over another, the trend overall seems to be that states are adopting more policies related to accelerated learning options. This is particularly true of dual/concurrent enrollment. In 2000, through a survey of state officials, Calvin M. Frazier found that 23 states had dual/concurrent enrollment programs established through legislation.¹ In 2001, the National Conference of State Legislatures (NCSL) reported that 32 states had laws or had recently passed legislation to establish and govern dual/concurrent enrollment programs.² In 2005, WICHE found that 42 states had adopted state policy related to dual/concurrent enrollment. Of those, 40 had adopted state statutes. Although there is a clear trend in the overall growth, there is at least one state, Massachusetts, that is moving away from dual/concurrent enrollment policy. The state's statute governing dual/concurrent enrollment policy is still technically on the books, but the legislature has not provided funding for the program in about four years.

In addition to policymaking, states are engaged in a considerable amount of other work related to accelerated learning, including disbursing federal grants designed to increase the successful participation

of low-income students in advanced placement courses and programs and to support selected test fee reimbursement.³ Many states have also formed local partnerships designed to provide dual/concurrent enrollment opportunities to students, as well as local consortia related to Tech-Prep. For instance, although Illinois does not have state policy related to dual/concurrent enrollment, there is a great deal of activity within the state through partnerships between school districts and colleges. Likewise, although Ohio does not have specific state policy related to Tech-Prep, it has a well-developed system, based on the efforts of local consortia.

Policymakers and education leaders often need to have a general understanding of the state policy landscape, but digging a little deeper into what is happening in each state can inform the discussion significantly. Therefore, this chapter begins with an overview of state policy activity related to accelerated learning in general and then provides a discussion of what states have done with regard to each of the four approaches in this analysis. Table 2.1 summarizes state policy activity by showing which states have adopted statutes and board policies related to each of the four accelerated learning options in this analysis.

As shown, most states have policies related to accelerated learning options. In total, 45 states have adopted policy, either through statute or board rule, related to at least one of the four accelerated learning options in this analysis. Thirty-two states have adopted state-level policy related to AP; 42 have policy related to dual/concurrent enrollment; 12 have policy related to IB; and 13 have policy related to Tech-Prep.

As of January 6, 2006, only five states - Alaska, Delaware, New Hampshire, New York, and Rhode Island - did not have any state-level policies related to any of the four accelerated learning options. However, several of these states are developing policies and may adopt something in the near future.

Advanced Placement

Of the 32 states with state policy related to AP, 29 have adopted statutes and 10 have adopted board rule. Many of the state policies related to AP define it and describe its function. Some examples follow.

Table 2.1. Summary of state-level policies related to accelerated learning, 2005

State	Advanced Placement		International Baccalaureate		Dual/Concurrent Enrollment		Tech-Prep	
	Statute	Board Policy	Statute	Board Policy	Statute	Board Policy	Statute	Board Policy
Alabama*						X		
Alaska								
Arizona	X				X			
Arkansas	X		X		X	X	X	
California	X		X		X		X	
Colorado	X		X		X	X		
Connecticut*	X	X			X	X	X	
Delaware								
Florida	X		X		X		X	
Georgia*	X		X		X	X		
Hawaii					X			
Idaho		X			X			
Illinois*	X						X	
Indiana*	X				X			
Iowa	X				X			
Kansas					X	X		
Kentucky	X		X		X		X	
Louisiana*	X							
Maine					X			
Maryland					X			
Massachusetts*	X				X			
Michigan					X			
Minnesota*	X	X	X	X	X	X		
Mississippi			X		X		X	
Missouri	X							
Montana	X				X			
Nebraska		X				X	X	
Nevada		X			X	X		
New Hampshire								
New Jersey	X				X			
New Mexico	X				X			
New York*								
North Carolina*					X		X	
North Dakota					X	X		
Ohio	X				X			
Oklahoma	X	X	X	X	X	X		
Oregon	X	X			X	X		
Pennsylvania*					X			
Rhode Island*								
South Carolina	X				X		X	
South Dakota					X			
Tennessee*					X			
Texas*	X	X	X		X	X	X	
Utah	X				X	X		
Vermont	X				X			
Virginia	X		X		X			
Washington	X		X		X		X	
West Virginia	X	X			X	X	X	
Wisconsin*	X	X			X			
Wyoming					X			

*An asterisk denotes that the state did not approve the summary analysis provided to the state higher education executive office.

- According to Arkansas state law, an AP course is a course of instruction that qualifies for college credit and is approved for credit as a high school course by the state board of education.
- In California, AP courses provide rigorous academic coursework opportunities for high school students and help improve the overall curriculum.
- West Virginia law defines AP programs as those that offer classes which are advanced in terms of content and performance expectations, relative to those normally available for the age/grade level of the student, and that provide credit toward graduation and possible college credit.

All states that define AP have adopted additional policies that build on their definitions.

While some states define the terms, some states utilize statistics about student performance in AP as part of their accountability systems. One example is New Jersey, where school districts must report the percentage of students in AP courses. Another is Indiana, which requires that the school corporation (district) annual performance report provide information about AP, including the percentage of students taking AP tests and the percentage who score a 3, 4, and 5. Still another example is Oklahoma, where the department of education must submit to the governor and legislative education committees a report on the program for the previous school year, including the number of students taking AP exams and the number of exams taken; the number of exams that receive a score of 3 or better; the number of schools that have received funding and the amount of awards, by type of award; the number of schools offering AP courses and the number with students taking AP exams; the number of students who receive assistance with the test fee and the average amount of assistance; and an evaluation of the cost versus the benefits of this program.

Overall, states approach AP in numerous ways and with a variety of goals. To simplify this complex web of policies, this chapter outlines some of the key policy areas and highlights some of the similarities and differences related to courses, examinations, incentives for success, and teachers.

Advanced Placement Courses

No state has gone as far as Arkansas in establishing policy related to AP courses. Through its Advanced Placement and International Baccalaureate Diploma Program, Arkansas mandated that all school districts must offer one College Board AP course in each of the four core areas - math, English, science, and social studies - beginning with the 2008-09 school year.

The requirement will be phased in over four years, beginning in 2005-06.

A few states have adopted policies indicating how AP courses should be weighted in terms of grade point average calculation. For instance, Connecticut law states that each local and regional board of education must establish a written policy concerning weighted grading for AP courses. In Georgia, AP coursework grades are weighted by the Georgia Student Finance Commission.

Only one state - Florida - makes any reference to joint dual enrollment and AP courses. It requires that such a course be incorporated within and subject to the provisions of the district interinstitutional articulation agreement. The agreement must certify that each joint dual enrollment and AP course integrates, at a minimum, the course structure recommended by the College Board and the structure that corresponds to the common course number. Although other states have policies related to joint courses, Florida is the lone state to adopt policy that relates to this unique integration of accelerated learning options.

Advanced Placement Examinations

Another policy area that some states have entered into relates to AP examinations. In practice, in order for a student to receive college credit, he or she must reach a minimum score on the examination, typically a 3 or better, depending on the state, postsecondary institution, and subject. For a variety of reasons, students may choose to not take the test. Indiana law stipulates that students who enroll in an advanced course may take the AP examination to receive high school credit for the advanced course. There is no consistent indicator, however, of whether a student will receive college credit. In other words, a 3 on an examination may result in college credit at one postsecondary institution but not at another because in most states the way credit is applied is determined by the institution or sometimes by the individual academic department at the college or university.

To remove some of this ambiguity, a few states have adopted policies that make this process uniform. For example, West Virginia high school students scoring at least a 3 on AP examinations receive credit at any state college or university. Similarly, University of Wisconsin System board policy states that scores of 3, 4, or 5 on AP examinations will be accepted for degree credit by all its institutions. Minnesota has stipulated additional guidelines: a score of 3 is the minimum for credit awards; the same amount of credit is granted for scores of 3, 4, and 5; credit is given for a specific college course if a test covers substantially similar material;

and no college or university can limit the total number of credits a student can earn through AP courses and tests.

In an effort to afford economically disadvantaged students the opportunity to benefit from AP examinations, several states have adopted policies that focus on test fee reimbursement for low-income students. Many states also have received grants from the U.S. Department of Education to fund test fee reimbursements for such students. A few states - Arkansas, Georgia, Oklahoma, and Wisconsin - have opted to pay for AP examinations as a result of state policy; while Minnesota may pay all or part of the exam fee for students of low-income families but is not required to do so.

Other states have policies regarding payment for test fees for either certain students or for tests taken in specified subject areas. California school districts receiving state funds may use them to pay for the costs of AP examinations for economically disadvantaged students. Students who demonstrate financial need in Texas are entitled to receive a test fee reimbursement subsidy of up to \$25 for the AP examination. School boards in Virginia must notify students receiving home instruction and their parents of the availability of AP tests and of financial assistance to low-income and needy students to take these examinations. And certain money appropriated to the Indiana Department of Education is distributed to pay the fees for each math or science AP examination taken by a resident student enrolled in a public secondary school.

Incentives for Success

Rather than focusing on students in need, a few states have opted to reward students for performance on AP examinations. Students in Texas, for instance, who receive a 3 or better may receive reimbursement of up to \$65 for the testing fee. West Virginia has an incentive-based shares program; when funding is available, students may receive an award for successful completion of an AP course and adequate performance on the exam. Oklahoma focuses on both need and performance: the Oklahoma Advanced Placement Incentive Program consists of two components - test fee assistance to public school students who are in financial need and funding to students who take more than one AP test in a year.

In addition to rewarding students, Texas has created incentives for schools and teachers. Schools may receive a one-time \$3,000 equipment grant for providing an AP course and \$100 for each student who scores a 3 or better on an AP test. A teacher may be awarded subsidized teacher training for an AP course; a one-time award for teaching one of these courses; and a share of the teacher bonus pool, which is distributed

by the school in shares proportional to the number of courses taught. Similarly, Oklahoma schools may receive funding for schools demonstrating successful implementation; subsidized training for AP courses or pre-AP courses; \$100 for each score of 3 or better on an AP exam, as long as these funds are used for program development; a share of the test fee for those students demonstrating financial need; and grants for developing an AP vertical team.

Teachers and Advanced Placement

Several states have adopted policies to ensure that those who teach AP courses are qualified to do so. For example:

- In Arkansas, a teacher may be awarded subsidized teacher training for AP courses. Further, the state board of education established specific and challenging training guidelines that require pre-AP or AP teachers to obtain College Board-sponsored or endorsed training.
- In Florida, school districts distribute a bonus to each AP teacher for each student who receives a score of 3 or higher on the AP exam and an additional bonus of \$500 to each AP teacher who has at least one student scoring 3 or higher on the AP examination in a school that is designated with a performance grade category of “D” or “F.”
- Illinois state law requires AP teachers to obtain appropriate training. The state board of education established training guidelines that require AP teachers to obtain recognized training by the College Board which provides teachers with the necessary content knowledge and instructional skills to prepare students for success in AP courses and examinations; provides middle grade, junior high, and high school teachers with AP vertical team training and other pre-AP professional development that prepares students for success in AP courses; and supports the implementation of an instructional program for students in grades six through 12, providing an integrated set of instructional materials, diagnostic assessments, and teacher professional development in reading, writing, and mathematics, to prepare all students for enrollment and success in AP courses and in college.
- Indiana teachers who are assigned to teach an advanced course may participate in summer training institutes offered by the College Board.
- Iowa state law established a summer program at the University of Iowa to train AP teachers.
- Upon receipt of adequate federal funding, the Kentucky Department of Education must expand

AP teacher training institutes and require teachers planning to participate in training to sign an agreement to teach at least one AP course in a Kentucky public school or the Kentucky Virtual High School, when assigned by the school principal.

- According to New Mexico state law, school districts and charter schools may create core curriculum frameworks to provide high-quality curricula in kindergarten through grade six to prepare students for pre-AP and AP coursework in grades seven through 12. The framework must include in-depth teacher professional development that includes vertical teaming in content areas.
- In West Virginia, the state board established a program to provide training to AP teachers, and by law, there must be an appropriation to the state board to assist in the implementation of teacher training. The state also established the West Virginia Advanced Placement Center to provide statewide coordination for the continued growth and development of AP programs in the state's high schools. The center coordinates AP teacher training institutes, establishes a cadre of instructors for the institutes, and provides follow-up teacher training for AP teachers.

Dual/Concurrent Enrollment

Most current state policy, both statute and board policy, relates to dual/concurrent enrollment. WICHE's comprehensive policy audit found that 42 states have adopted state policy related to dual/concurrent enrollment. Of those states, 40 have adopted statutes, and 15 have adopted board policy. As with AP policy, states vary widely in terms of the breadth and depth of regulating dual/concurrent enrollment. States have adopted policies that specify program eligibility, indicate how credit is awarded, identify who pays for dual/concurrent enrollment programs, require counseling and information sharing, implement institutional accountability provisions, and create incentives for success. To better illuminate the general trends in key policy areas, this chapter will highlight the similarities and differences among these categories.

Program Eligibility

Most states that have policies related to dual/concurrent enrollment lay out minimum eligibility requirements. The details of the requirements vary by state, but in general, they include minimums for class standing, grade point average, class rank, and/or score on a standardized test. Additional requirements involve securing a recommendation from a school

administrator; completing an application form; and/or meeting specified institutional requirements or course prerequisites. Table 2.2 summarizes the minimum eligibility requirements as defined in state policy across the 50 states.

Thirty states have adopted state-level policy that specifies minimum eligibility requirements for students to participate in dual/concurrent enrollment. Another two states - Mississippi and Nebraska - have recommended eligibility criteria through state policy, while New Mexico and Utah indicate that agreements between the local schools or districts and postsecondary institutions need to specify eligibility requirements. The most common requirement established through state policy is that the student must have a minimum class standing, usually as a junior or senior. In some states, like Iowa, students in 9th and 10th grade are eligible if they are identified as gifted and talented. Eight states require students to meet institutional admission requirements or course prerequisites, while three require a minimum grade point average. The same number (three) require a minimum class rank, and more (eight) require students to achieve a minimum score on a standardized test. Finally, seven states require a recommendation from either a high school principal or superintendent, and two states require students to complete an application form to participate in the program.

Application of Course Credit

Once students have met eligibility requirements, the question then becomes how course credit is applied. Table 2.3 summarizes how state policy addresses the application of course credit.

As shown from Table 2.3, 31 states have adopted policy that specifies how dual/concurrent enrollment credit is applied. Twenty-three of those 31 states offer an opportunity to earn both high school and postsecondary credit. Most often, when a student earns both high school and college credit, the state-level policy explicitly mandates that the credit also apply toward high school graduation requirements. One state - Minnesota - requires students to designate the type of credit to be awarded at the time of enrollment.

A few states require the agreements between the local school districts or schools to specify how credit is applied. For instance, in Colorado when a high school student enrolls in postsecondary courses, the school district and the higher education institution must enter into a cooperative agreement that specifies the high school academic credit to be granted for coursework successfully completed by the student and the requirement that the coursework qualify as credit applicable toward earning a postsecondary degree or certificate.

Table 2.2. Eligibility for participation in dual/concurrent enrollment as defined in state policy

State	Determinants of Eligibility	Notes
Alabama	Standing Recommendation GPA	
Arizona	Standing Course/Institution Requirements	
Arkansas	Recommendation	Must meet additional, unspecified requirements for AP.
Colorado	Standing	Student is eligible if his or her parent or legal guardian, with the advice and counsel of the high school principal, determine that the student needs higher-level coursework or needs a different environment.
Florida	GPA Standardized Test	Community college boards of trustees may establish additional admissions criteria, which must be included in the district interinstitutional articulation agreement.
Georgia*	Standing	The high school principal and advisement faculty are responsible for informing the postsecondary institution of the academic, emotional, social, and other characteristics of the student that should be considered in the decision to enroll or not enroll the student.
Hawaii	Standardized Test	The student must also be under the age of 21.
Idaho	Standing	The student is not eligible if he or she is a foreign exchange student.
Indiana*	Course/Institution Requirements	
Iowa	Class Rank Standing	Students who are in 9th and 10th grade are also eligible if they are identified as gifted and talented.
Kansas	Standing Course/Institution Requirements Recommendation	Students must also demonstrate the ability to benefit from participation.
Maine	GPA Recommendation	The student also must receive school and parental approval.
Massachusetts*		The board of education and the board of higher education define which students may qualify for the dual enrollment program and establish criteria for admission. This program, however, has not been funded in about four years.
Michigan	Standardized Test Recommendation	
Minnesota*	Standing Class Rank Standardized Test	
Mississippi	Course/Institution Requirements GPA Recommendation	These are <i>recommended</i> requirements.
Montana	Standing Application	
Nebraska	Standing Course/Institution Requirements GPA Class Rank Standardized Test	These are voluntary guidelines as laid out in the Comprehensive Statewide Plan for Postsecondary Education.
Nevada	Standing	High school students below junior level, when identified as academically talented by the school district and recommended by the high school principal, are reviewed on a case-by-case basis for enrollment.
New Mexico		Dual credit agreements established between the public school district and the postsecondary institution must indicate the methods of qualifying students for dual credit.
North Carolina*	Standing	Students are eligible for dual/concurrent enrollment programs as early as 9th grade.
North Dakota	Standing Course/Institution Requirements Recommendation Application	
Ohio	Standing	
Oklahoma	Class Rank Standardized Test	
Oregon	Standing	
Pennsylvania	Standing Standardized Test	Student must also demonstrate readiness for college-level work.
South Dakota	Standing	
Texas*	Standing Course/Institution Requirements Standardized Test	
Utah		Local schools and the higher education institution must jointly establish eligibility requirements, which may include junior or senior standing, sophomores by exception; a grade point average, ACT score, or a placement score which predicts success; letters of recommendation; and approval of high school and college officials.
Vermont	Course/Institution Requirements	Enrollment also must be approved by the district as being in the best interest of the student.
Washington	Standing Standardized Test	Participating higher education institutions, in consultation with the school district, may establish admission standards for these students.
West Virginia	Course/Institution Requirements Recommendation	
Wisconsin*	Standing Course/Institution Requirements	
Wyoming		Additional eligibility requirements may be established by the postsecondary institution.

*An asterisk denotes that the state did not approve the summary analysis provided to the state higher education executive office.

LEGEND

STANDING: Must have a minimum class standing, usually junior or senior.
 COURSE/INSTITUTION REQUIREMENTS: Must meet minimum requirements for course or institution.

RECOMMENDATION: Requires a recommendation by the high school principal or superintendent.
 STANDARDIZED TEST: Requires a minimum score on a standardized test.

APPLICATION: Requires student to complete an application form.
 GPA: Requires a minimum grade point average.
 CLASS RANK: Requires a minimum class rank.

Table 2.3. Application of course credit with respect to dual/concurrent enrollment

State	How Course Credit Is Applied	Notes
Alabama	HS PS	
Arizona		Community college district governing boards may authorize community colleges to offer college courses that count toward both high school and college graduate requirements.
Arkansas	HS PS G	
California	HS PS	
Colorado	HS PS G	The school district and postsecondary institution must enter into a cooperative agreement which specifies the high school academic credit to be granted for coursework and the requirement that the coursework qualify as credit applicable toward earning a postsecondary degree or certificate.
Florida	HS PS G	
Georgia*	HS PS G	
Hawaii	HS PS G	
Idaho	HS PS G	Students may earn secondary credit, postsecondary credit, or both, but must designate which at the time of enrollment.
Indiana*	HS PS G	
Iowa	HS PS G	
Kansas	G	Agreements between the school district and the postsecondary institution determine the academic credit to be granted, either college credit or college credit and high school credit.
Maine	PS	The high school may grant academic credit toward a high school diploma.
Massachusetts*	HS PS	This statute still exists on record, but the legislature has not provided funding for the program in about four years.
Michigan	HS PS G	A student can earn high school credit, postsecondary credit, or both, depending on certain agreements.
Minnesota*	HS/PS	Students must designate the type of credit to be awarded at time of enrollment.
Mississippi	PS	Grades and college credits earned are recorded on the college transcript and may be transferred or used for college graduation requirements only after the student has received his or her high school diploma.
Montana	HS PS	A student may earn both high school and college credits as determined by the interlocal agreement.
Nebraska		According to voluntary guidelines for dual credit programs, dual credit students are high school students who take a course for both college and high school credit. Concurrently enrolled students are high school students who take college courses for college credit only (not high school credit).
Nevada	G	
New Jersey	PS	
New Mexico	HS PS G	
North Dakota	HS PS	
Ohio	HS PS G	
Oregon	HS PS	
Pennsylvania	HS PS G	
South Dakota	PS G	
Texas*	HS PS	
Utah	HS PS G	
Vermont	PS G	The school board awarding graduation credits must consider the recommendation of the regional advisory board and must provide an opportunity for the secondary student also to receive postsecondary credit.
Washington	HS PS G	
West Virginia	HS PS	
Wyoming	HS PS G	

*An asterisk denotes that the state did not approve the summary analysis provided to the state higher education executive office.

LEGEND

HS: Student earns high school credit. **PS:** Student earns postsecondary credit. **HS/PS:** Student earns high school or postsecondary credit. **G:** Credit counts toward high school graduation requirements.

Carrying the Cost Burden

A concern for many states, school districts, students, and parents is who bears the cost burden of dual/concurrent enrollment programs. States often are concerned about paying twice for educating a student, which is commonly referred to as double dipping. School districts worry that they will lose much-needed state funding if their secondary students are not on campus, while students and parents often wonder how they can afford tuition and the related costs of college participation. States vary considerably on whether and how they address the financing of dual/concurrent enrollment (Chapter 6 provides additional details about the range of state strategies). To provide an introduction into the similarities and differences among states' policies related to this issue, Table 2.4 summarizes the three key strategies for carrying the cost burden of dual/concurrent enrollment.

As shown, some states assume the cost, and some school districts or schools carry the burden. In other cases, students and their parents pay for participation. And other arrangements exist as well: in Mississippi, tuition and costs for university-level courses must be paid from grants, foundation funds, or other private sources, directly to the participating university.

Transportation to the college campus also must be considered in calculating the overall cost of providing dual/concurrent enrollment. Thirteen states - Colorado, Florida, Kansas, Michigan, Minnesota, Mississippi, Montana, New Mexico, North Dakota, Ohio, Pennsylvania, Washington, and Wisconsin - have adopted policies that specify who is responsible for the costs of transportation. In most states, the policy absolves the state from responsibility. A few exceptions to this rule include Minnesota, where students or their parents may apply to the school district for reimbursement for transportation expenses; New Mexico, where dual credit agreements address a method for how the school district will fund and schedule the transportation of students; Ohio, where in a school district or community school that provides transportation to students in grades nine through 12 a parent of a student eligible for free or reduced-price lunch may apply to the board of education for full or partial reimbursement for the costs of transportation to the college; Pennsylvania, where grants from the department of education to schools cover the cost of transportation; and Wisconsin, where a student's parent or guardian may apply for reimbursement for transportation costs if he or she is unable to afford them.

When targeting economically disadvantaged students with dual/concurrent enrollment, it is imperative to consider whether the state policies create a barrier to participation for them. Several states have adopted

policies that indicate that financial aid is not available to dual/concurrent enrollment students, but in most of these cases, the state assumes the burden of paying for dual enrollment courses. For example:

- Georgia students enrolled in a postsecondary institution for secondary credit are not eligible for any other state student financial aid at a postsecondary institution for courses taken through this program, but the state department of education created a secondary options grant account with funds appropriated by the general assembly. The department pays postsecondary institutions from this grant account the lesser of the following amounts for students enrolled:
 - The actual costs of tuition, materials, and fees directly related to the approved courses taken by the students.
 - The amount that the students would have earned if those students had been in equivalent instructional programs in a local school system for that portion of the instructional day in which the students were actually enrolled in postsecondary institutions.
- Ohio students in dual/concurrent enrollment are ineligible for direct financial aid though state and federal programs because annually the department of education pays each college for any participant enrolled in the prior school year.

An exception is North Dakota whose state policy explicitly states that dual credit students are not eligible for federal financial aid and the student and his or her parent or legal guardian are responsible for all costs.

Other states have adopted policies that specifically provide financial assistance to needy students in dual/concurrent enrollment programs. Examples of this approach include:

- Indiana: Upon demonstration of financial need, a student accepted for admission to an eligible institution may receive financial assistance from that institution.
- New Jersey: State law indicates that the dual/concurrent enrollment program must have procedures to ensure that no student who is academically eligible is excluded from participation in college courses offered on high school campuses because of inability to pay.

Maryland's financial assistance program does not focus only on economically disadvantaged students. Each institution of higher education that participates in the Part-Time Grant Program (for undergraduate part-time students) must establish criteria for awarding a grant or waiver to dual enrollment students.

Table 2.4. Who pays for participation in dual/concurrent enrollment programs?

	State	School District/ School	Student	Notes
Arizona				Community college districts and school districts enter into agreements that address the manner in which tuition is paid by or on behalf of each student.
Arkansas			X	
Colorado		X		The student or the student's parent or legal guardian pays tuition to the postsecondary institution and is reimbursed by the school district upon successful completion of the course.
Florida	X			
Georgia*	X			The state department of education pays to the postsecondary institutions from the secondary options grant account the lesser of the following amounts for students enrolled: <ul style="list-style-type: none"> • The actual costs of tuition, materials, and fees directly related to the approved courses. • The amount that the students would have earned if those students had been in equivalent instructional programs in a local school system for that portion of the instructional day in which the students were actually enrolled in postsecondary institutions.
Idaho		X		
Indiana*				A representative of the school meets with the student to discuss his or her financial obligations.
Iowa				High schools pay the partnering college for tuition, textbooks, and fees, and students must reimburse the district if they do not complete or successfully pass courses.
Kansas			X	
Maine	X			The department pays 50 percent of the in-state tuition for the first three credit hours taken each semester by a student and up to six credit hours per academic year.
Michigan		X		
Minnesota*	X			
Mississippi				Tuition and costs are paid from grants, foundation, or other private sources directly to the participating university.
Montana				Interlocal agreements state the amount for each credit to be paid to the postsecondary institution by the district or student, but the student is responsible for transportation, books, and supplies. If a student is accepted into the program and drops out of a class, the postsecondary institution reimburses the district or the student.
Nebraska			X	
New Jersey			X	State law requires procedures to ensure that no student who is academically eligible is excluded from participation because of inability to pay.
New Mexico		X		
North Dakota			X	
Ohio				If the student receives only college credit, he or she is responsible for payment of all costs. If the student successfully completes the course and receives both high school and postsecondary credit, the college is reimbursed.
Oregon				School districts negotiate a financial agreement with postsecondary institutions for the payment of tuition, fees, and other costs.
Pennsylvania	X			
South Dakota				The school district may pay all or part of the tuition and fees, but the student is responsible for any tuition, fees, and costs not paid by the school district.
Tennessee*				Students may apply for a dual enrollment grant.
Texas*			X	Postsecondary institutions may waive all or part of the tuition and fees for high school students enrolled in courses for which they receive joint credit.
Utah	X			Tuition or fees may not be charged to high school students, but students may be assessed a one-time admissions application fee.
Vermont		X		
Washington		X		
West Virginia			X	To make college courses more accessible to high school students, an institution may establish a special tuition fee structure for high school students.
Wisconsin*		X		If a student fails or does not complete the course at the postsecondary institution or technical college, the student or parent or guardian must reimburse the school board the amount paid on the student's behalf.

*An asterisk denotes that the state did not approve the summary analysis provided to the state higher education executive office.

Information Sharing and Counseling

As shown in the previous discussion, states have adopted accelerated learning options policy through various approaches. Several states have acknowledged that adopting policy related to these programs means little if the students and their parents are not informed about opportunities to participate. As a result, states have chosen to require information sharing or counseling regarding dual/concurrent enrollment in an effort to inform those who might benefit from these programs. Table 2.5 summarizes the policy approaches

that states have adopted to provide counseling and information to students regarding dual/concurrent enrollment.

Similar to the other specific policies, states vary widely in how they approach dual/concurrent enrollment. Most state policies that require information sharing mandate that information is provided to all students. In total, 12 states have adopted policy that requires information to be provided to all students. One state - Oregon - has opted to reach a specific group of students. Each Oregon school district must establish

Table 2.5. Information sharing and counseling regarding dual/concurrent enrollment

State	Policy Requirements for Information Sharing and Counseling	Notes
Colorado	All Written Notice	
Florida	All	
Georgia*	All Counseling	
Idaho	All Written Notice Counseling Form	If an institution accepts a high school student for enrollment, it sends written notice to the student and the student's school district within 10 days of acceptance.
Indiana*	Written Notice Counseling	A representative of the school must meet with each interested student to discuss the student's eligibility to participate in the program; the courses in which the student is authorized to enroll; the postsecondary credit the student earns upon successful course completion; the consequences of a student's failure to successfully complete a course; the student's schedule; the financial obligations of the student and the school; the responsibilities of the student, the student's parent or guardian, and the school; and other matters concerning the program.
Iowa		If an eligible institution accepts a high school student for enrollment, the institution must send written notice to the student, the district, and the Iowa Department of Education.
Michigan	All Counseling Form	The school district must provide to the student a letter signed by the principal indicating the student's eligibility. Within a reasonable time, the postsecondary institution must send written notice to the student and school district.
Minnesota*		To participate in the postsecondary enrollment options program, a college or university may provide information about its programs to a secondary school, student, or parent, but may not recruit or solicit participation on financial grounds.
Nebraska		Through voluntary guidelines, eligible students are provided appropriate course materials, including policies, college procedures, course outline/syllabus, and assessment materials. They receive guidance regarding program responsibilities, weighted credit options, and specific grading practices.
North Carolina*	Counseling	
North Dakota	All Counseling	High school counselors and teachers are encouraged to advise students regarding their academic readiness to participate in dual credit courses. Campuses may publish guidelines which describe criteria for student eligibility.
Ohio	All Counseling Form	If a college accepts a student, it must send written notice to the student, the student's school district, community school, or nonpublic school, and the superintendent of public instruction. In addition, within 10 days after each enrollment for a term, the college must also send these individuals written notice indicating the courses and hours of enrollment of the student and the enrollment options.
Oklahoma	All	
Oregon	All Certain	Each school district must establish a process to ensure that all at-risk students and their parents are notified about the program and ensure that providing information to high school students who have dropped out of school is a priority.
Pennsylvania		The Pennsylvania Department of Education must publish promotional materials on its publicly accessible website that may be used by school entities to inform parents and students enrolled in the school entities about the requirements, features, and opportunities of concurrent enrollment programs.
Virginia	All	Local school boards must implement a plan to notify students and their parents of the availability of AP, IB, and dual enrollment courses, the qualifications for enrolling in such classes and programs, and the availability of financial assistance to low-income and needy students to take the AP and IB examinations.
Washington	All	

*An asterisk denotes that the state did not approve the summary analysis provided to the state higher education executive office.

LEGEND

ALL: Policy requires information to be provided to *all* students. COUNSELING: Policy requires counseling to students who have enrolled or who intend to enroll in dual/concurrent enrollment.
 CERTAIN: Policy requires information to be provided to *certain* students. FORM: Policy requires students or parents to sign a form indicating they received counseling or relevant information.
 WRITTEN NOTICE: Policy requires students to provide written notice of intent to enroll.

a process to ensure that all at-risk students and their parents are notified about the program and that information is provided to high school students who have dropped out of school.

In seven states, policies require counseling to students who have enrolled or who intend to enroll in dual/concurrent enrollment. Examples of this type of policy include:

- Each local school system in Georgia must provide counseling services to all eligible students and their parents or guardians before the students enroll in eligible postsecondary institutions to ensure that the students and their parents or guardians are aware of the possible consequences of enrolling in dual/concurrent enrollment.

- To the extent possible, school districts in Idaho and Michigan must provide counseling services to students and their parents or guardians before students enroll about a variety of risks and consequences associated with the program.
- Programs in North Carolina must emphasize parental involvement and provide consistent counseling, advising, and parent conferencing so that parents and students can make responsible decisions regarding course taking and track the students' academic progress and success.
- In North Dakota, the responsibility falls more to the high school counselors and teachers specifically. They are to advise students regarding their

academic readiness to participate in dual credit courses.

- Ohio law specifically addresses counseling for students in nonpublic schools. Chief administrators at these schools must provide counseling services to students in grades eight through 11 and to their parents before students participate in the program to ensure that they are fully aware of the possible risks and consequences of participation. This counseling must include explaining the fact that funding may be limited and that not all students who wish to participate may be able to do so.

Three states - Idaho, Michigan, and Ohio - require the students and their parents or guardians to sign a form stating that they have received the required counseling services regarding the program.

An additional state policy component related to dual/concurrent enrollment that has emerged in Colorado, Idaho, and Indiana is a requirement that students provide written notice of their intent to enroll. In Colorado, any high school student who intends to enroll in an institution of higher education must give written notice to the school district at least two months prior to such enrollment.

In some states, however, the requirement to provide written notice falls on the postsecondary institution. In Indiana, if an institution accepts a high school student for enrollment, the institution must send written notice, which includes the course and number of hours, to the student and the student's school district within 10 days of acceptance. Similarly, in Ohio, if a college accepts a student, it must send written notice to the student, the student's school district, school, and the superintendent of public instruction within 10 days after acceptance; in addition, the college must send these individuals a written notice indicating the courses and hours of enrollment and the enrollment options. In Michigan, the postsecondary institution must send written notice to the student and his or her school district within a reasonable time after registration. In Iowa, if an eligible institution accepts a high school student for enrollment, the institution must send written notice to the student, the district, and the Iowa Department of Education that lists the course, the clock hours, and the number of hours of postsecondary or vocational-technical credit that the student will receive upon successful completion of the course.

Institutional Accountability

The proliferation of dual/concurrent enrollment programs may raise questions about whether the programs are meeting their stated objectives and whether they are of the desired quality. Ten states have built institutional accountability mechanisms into

their state policies to attempt to account for these questions. Some specific examples:

- Each community college district in Arizona must report annually to the legislature's joint budget committee on the courses offered in conjunction with high schools during the previous fiscal year. Further, each district must conduct tracking studies to include, at a minimum: the high school graduation rate; the number of students continuing their studies after graduation at a community college or university in Arizona; the performance of the students in subsequent college courses in the same discipline or occupational field; and the student's grade point average after one year at an Arizona postsecondary institution, as compared to his or her college grade point average for courses completed while still in high school.
- District school boards in Florida must annually assess the demand for dual enrollment and consider strategies and programs to meet that demand. Further, each joint dual enrollment and AP course must be incorporated within and subject to the provisions of the district interinstitutional articulation agreement, which must include a delineation of institutional responsibilities regarding student screening prior to enrollment and monitoring of student performance subsequent to enrollment.
- Michigan intermediate school districts must collect annually from each constituent school district information on:
 - The amount of money expended for payments required under this program.
 - The number of eligible students who enrolled in the school district and the number of those who enrolled in one or more postsecondary courses and received payment, both in aggregate and by grade level.
 - The percentage of the school district's enrollment represented by the eligible students, both in aggregate and by grade level.
 - The total number of postsecondary courses for which the school district made payment, the number of courses for which postsecondary credit was granted, the number of those courses for which high school credit was granted, and the number of those courses that were not completed by the student.
- Nebraska's *Comprehensive Statewide Plan for Postsecondary Education* lays out voluntary guidelines for dual credit programs. According to this document, courses in Nebraska should reflect college-level experiences and rigor as well as district and state standards and practices.

Course outlines or syllabi (including, at minimum, a description of content, teaching strategies, performance measures, grading standards, resource materials, objectives/outcomes, and course calendar) utilized in the program should meet district, state, and college/university standards.

- North Carolina law requires dual enrollment programs that target students at risk of dropping out of high school and those who would benefit from accelerated instruction to be held accountable for meeting measurable student achievement results and establishing joint institutional responsibility and accountability for support of students and their success.
- A school entity in Pennsylvania that receives a grant from the department of education must submit an annual report to the department that includes the eligible postsecondary institution(s) with which the school entity has established a concurrent enrollment program; the number of concurrent students participating; the number of concurrent students participating who are enrolled in early college high school, middle college high school, or gateway to college programs; the approved courses offered; the total approved cost for each concurrent course; and the total amount of grant funds received. Further, the department must produce an annual report using the reporting information submitted by school entities, which must be provided to specified members of the state legislature and must be published on the department's publicly accessible website.
- If a district in Texas with one or more schools has had an average of at least 26 students in the high school graduating class for the five preceding years and has been among the lowest 10 percent in the percentage of students graduating from the high school and enrolling in college for any two consecutive years in the preceding five, the district must establish an accurate method of measuring progress toward stated goals, which may include tracking the percentage of district high school students who are enrolled in dual/concurrent enrollment.
- The Utah State Board of Education developed a school performance report that requires data on the number of students taking concurrent enrollment courses and the number and percent who receive college credit. Further, the commissioner of higher education and the state superintendent must appoint a concurrent enrollment coordinating committee, composed of an equal number of higher education and public education administrators, to coordinate and oversee concurrent enrollment activities.
- The superintendent of public instruction in Virginia developed (and the board of education approved) criteria for determining and recognizing educational performance in the commonwealth's public school divisions and schools. In recognizing educational performance in the school divisions, the board must include consideration of special school division accomplishments, such as the numbers of dual enrollments.
- Each college or university in West Virginia that offers college-level courses for or in high schools must maintain a record of the courses and their enrollments and submit reports of college courses for high school students. The state board has adopted education standards for student, school, and school system performance. These standards include measures of performance and progress, such as the percentage of students who enrolled in dual credit classes and the percentage who completed them, by grade level.

Incentives for Success

Many states have implemented accountability mechanisms, but a few states have also adopted incentives for success (or disincentives for failure) that focus on the student. For example:

- Colorado statute mandates that students pay tuition up front and that the school districts reimburse the students upon successful completion of courses.
- High schools in Iowa must pay the partnering college for college tuition, textbooks, and fees, but students must reimburse the district if they do not complete or pass the course.
- If a student in South Dakota receives a failing grade in a postsecondary course, then the student is no longer eligible to enroll in other dual credit courses.
- In Wisconsin, if a student fails or does not complete a course at the postsecondary institution or technical college, the student or the parent or guardian must reimburse the school board the amount paid on the student's behalf.

International Baccalaureate

While a large number of states have statutes concerning dual/concurrent enrollment, only 12 have state policy related to IB. Of those states, 12 have statutes and just two have adopted board rule. Where they exist, policies concerning IB are most commonly linked to policies on AP. For example, Arkansas had adopted the Advanced Placement Incentive Program, which was designed to provide advanced

educational courses that were easily accessible and prepare students for admission to and success in a postsecondary educational environment. In 2005, lawmakers changed the law so that it is now known as the Arkansas Advanced Placement and International Baccalaureate Diploma Program.

In Georgia, AP and IB coursework grades are both weighted by the Georgia Student Finance Commission in calculating students' overall grade point averages. In Minnesota, a statute states that both AP and IB programs are "well-established academic programs for mature, academically directed high school students."

Sometimes, legislation focuses solely on the IB program, as in California and Colorado. California law states that the IB Diploma Program is a comprehensive and rigorous two-year curriculum, leading to examinations for high school students. Similarly, Colorado law - which recognizes the importance of innovative and effective curricula for high school students - indicates that the IB Diploma Program is an established program providing innovative curricula and that a student who has completed this program is viewed as highly attractive by institutions of higher education due to the student's ambition, work habits, and scholarship. In an effort to retain the state's best and brightest, Colorado requires postsecondary institutions to adopt comprehensive and reasonable policies to offer credit to IB students.

No other states have done what Minnesota and Oklahoma have done through board policy in establishing common practices regarding the IB Diploma Program, however. Minnesota State Colleges and Universities Board policy establishes common practices for awarding credit to students who have earned an IB diploma in high school. The policy states that students who complete the diploma with a score of 30 or higher are offered 12 quarter or eight semester credits for each of three higher-level examinations, plus three quarter or two semester credits for each of the subsidiary exams. Similarly, the Oklahoma State Regents for Higher Education, as part of admission standards to postsecondary institutions, established that institutions must add a standard weighting to IB higher-level courses.

Tech-Prep

While more states seem to be adopting state-level policy related to dual/concurrent enrollment, fewer states appear to be adopting policy related to Tech-Prep. In 2005, South Carolina repealed Tech-Prep language and replaced it with legislation intended to reform high school curricula around a career cluster model. Despite a potential movement away from legislation regarding Tech-Prep, 13 states have statutes, although none have board policy, governing it.

Of the states with relevant statutes, Texas's law appears to be the most comprehensive. According to Texas' state law, Tech-Prep is a program of study that:

- Combines at least two years of secondary education with at least two years of postsecondary education in a nonduplicative, sequential course of study based on the recommended high school program adopted by the state board of education.
- Integrates academic instruction and vocational and technical instruction.
- Uses work-based and worksite learning, where available and appropriate.
- Provides technical preparation in a career field, such as engineering technology; applied science; a mechanical, industrial, or practical art or trade; agriculture; health occupation; business; or applied economics.
- Builds student competence in mathematics, science, reading, writing, communications, economics, and workplace skills through applied, contextual academics and integrated instruction in a coherent sequence of courses.
- Leads to an associate's degree, two-year postsecondary certificate, or postsecondary two-year apprenticeship with provisions, to the extent applicable, for students to continue toward completion of a baccalaureate degree.
- Leads to placement in appropriate employment or to further education.

Further, the state encourages Tech-Prep consortia to include four years of secondary education in a Tech-Prep program. A Tech-Prep consortium is a regional collaboration of school districts, institutions of higher education, businesses, labor organizations, and other participants that work together to effectively implement a regional Tech-Prep program.

Arkansas has two statutes related to Tech-Prep, but they do nothing more than define it. In Arkansas, a Tech-Prep program is a combined secondary and postsecondary program that leads to an associate of applied science or other occupational degree or two-year certificate; provides technical preparation in engineering technology, applied science, agriculture, health, business, or a mechanical, industrial, or practical art or trade; builds student competence in mathematics, science, and communications; and leads to placement in employment. California law simply defines Tech-Prep as a system designed to deliver the school-to-career programs.

Connecticut takes policy a step further by establishing a statewide advisory committee to recommend to the state board of education how alternative technical training models for students in grades 11 and 12, such

as Tech-Prep, can be expanded. Kentucky chose an approach more like Connecticut's, establishing the School-to-Careers System, which serves as an umbrella for career-related programs in the public schools, including School-to-Work, Tech-Prep, and High Schools That Work initiatives. The state also has the School-to-Careers Grant Program, which provides matching funds to school districts or consortia of districts for the development and implementation of comprehensive plans. These grant funds may be used to enhance ongoing efforts, such as Tech-Prep. Similarly, Mississippi created the Tech-Prep Fund for implementation of Tech-Prep programs in grades seven through 12 and in the public community colleges in the state.

North Carolina has taken a slightly different approach to Tech-Prep policy. The state requires schools to develop a technology plan for using funds from the State School Technology Fund and other sources to improve student performance through the use of learning and instructional management technologies. Components of the plan should include proposals for addressing equipment needs for vocational education, Tech-Prep, and science instruction.

Implications

WICHE's audit of state-level accelerated learning policies reveals several general trends, as well as a few specific tendencies, which together describe the state policy landscape.

It's All in How You Say It

Policy analysts, policy organizations, foundations, and other groups currently appear to be pushing toward expanding accelerated learning options to all students, instead of targeting only highly motivated or academically talented students, and the current literature tends to support the validity of this. In his 2006 report, *The Toolbox Revisited: Paths to Degree Completion from High School through College*, Clifford Adelman reaffirms his earlier findings that there is a relationship between a rigorous high school curriculum and postsecondary success, which many researchers and policy analysts have used to promote the notion that all students would benefit from accelerated learning options.⁴ Taking this a step further, Nancy Hoffman, in *Add and Subtract: Dual Enrollment as a State Strategy to Increase Postsecondary Success for Underrepresented Students*, states that "dual enrollment is a promising 'next best thing' for states wishing to increase the number of underrepresented students gaining a postsecondary credential."⁵

In 2003, Thomas Bailey and Melinda Mechur Karp reviewed 45 published and unpublished reports, articles, and books in an effort to examine credit-based

transition programs and their ability to increase college access and success for all students.⁶ They found that despite the popularity and growth of these programs in recent years, there is little definitive evidence about their overall effects. While more states are turning to accelerated learning options as a strategy for improved preparation and increased access, much more research needs to be done to understand the effects of accelerated learning options on postsecondary access and success, especially for underserved students.

While the literature in general tends to support the notion that accelerated learning options hold promise, the policy activity in the states remains diverse and is even sometimes contradictory. For instance, several states have adopted policy language that provides direction as to the overall goal and target of dual/concurrent enrollment programs. Much of the language in statute and board policy targets certain students - those who are academically talented, prepared, or highly motivated, not necessarily those who are economically disadvantaged or who might benefit from getting a head start on college. For instance:

- Although no longer funded, California's Advanced Placement Challenge Grant Program was designed to assist public high schools in providing access to academically challenging, college-level courses to *interested and prepared students* in the state.
- In Colorado, any student who enrolls in postsecondary courses is expected to show a *high degree of maturity and responsibility*, especially with regard to the successful completion of such postsecondary courses. In addition, Colorado's Postsecondary Enrollment Act provides a wider variety of options to high school students by encouraging and enabling *qualified students* to enroll in courses or programs in eligible postsecondary institutions.
- Connecticut Board of Trustees of Community-Technical Colleges policy authorizes community colleges to accept AP high school *students who demonstrate sufficient scholastic ability* and who are approved by the high school principal or designated representative.
- The University System of Georgia Board of Regents policy recognizes the need to provide *academically talented high school students* with opportunities for acceleration of their formal academic programs through dual/concurrent enrollment.
- Idaho State Board of Education policy specifically encourages the use of College Level Examination Program (CLEP) tests for basic courses and AP to attract *good students* and encourages AP programs for high school students.

- Minnesota statute states that both AP and IB programs are well-established academic programs for *mature, academically directed high school students*.
- Each school district in South Carolina must provide AP courses in all secondary schools that enroll an adequate number of *academically talented students* to support courses.
- In West Virginia, AP and honors programs are designed to meet the needs of students who have the *potential and desire* to complete curriculum more demanding than that offered in the regular classroom for their current grade level.

While preparation is a legitimate public goal, focusing on those students who are academically prepared, mature, and talented may unintentionally create a barrier to students who may not be identified as having those qualities. This runs counter to the policy recommendation often promoted by researchers and policy organizations which endorses accelerated learning options for underserved students, leaving a significant gap between research and actual policy.

Some states, however, have adopted less directive language, but they still often have minimum eligibility requirements for participation in accelerated learning programs, especially dual/concurrent enrollment. In an effort to ensure student success, these requirements may unintentionally act as a barrier to economically disadvantaged or minority students. Some examples:

- The Kansas Legislature declared that secondary school students should be challenged continuously in order to maintain their interests in the pursuit of education and skills critical to success in the modern world. Yet at the same time the law may imply that only certain secondary school students should be challenged. To be a concurrent enrollment student in Kansas, a person must demonstrate the ability to benefit from participation and be authorized by the school principal to apply at the postsecondary institution, in addition to being enrolled in grades 11 or 12 and being deemed acceptable to or accepted at a postsecondary institution.
- North Dakota's Postsecondary Enrollment Options Program was established in state law and declares that any North Dakota public high school student enrolled in grades 11 or 12 is eligible to receive high school and postsecondary credit for the successful completion of an academic or career and technical education course offered by an accredited postsecondary institution. The student's superintendent, however, must provide written permission for the student to participate in the program.

Other states have chosen to adopt clear language that demonstrates their intention of being inclusive. Arkansas, for example, established the Arkansas Advanced Placement and International Baccalaureate Diploma Program, which was designed to provide advanced educational courses that were easily accessible and that prepare students for admission to and success in a postsecondary educational environment.

Two other examples of more inclusive general policy statement are found in Iowa and Kentucky. Iowa's Postsecondary Enrollment Options Act was enacted in 1987 to promote rigorous academic pursuits and provide a wider variety of options to high school students. Although the law does have requirements, they are minimal: the student must be in 11th or 12th grade, or be identified as gifted and talented if the student is in 9th or 10th grade. Each secondary-school-based decision-making council in Kentucky must establish a policy on the recruitment and assignment of students to AP, IB, dual enrollment, and dual credit courses that recognizes that all students have the right to be academically challenged and should be encouraged to participate in these courses.

This gap between research and policy coupled with potentially mixed messages in policy may be creating some unintended consequences for underserved students. Whether policy language is sufficiently inconclusive requires further study.

Results Come From Policy (and More)

Another implication worth noting is that simply having state-level policy, either through statute or board rule, does not necessarily mean that the policies are practiced consistently or implemented as intended. For instance, Minnesota, the first state to adopt a dual enrollment program, has arguably one of the nation's most comprehensive policies. A 2001 audit report of the Minnesota State Colleges and Universities Post-Secondary Enrollment Options Program, however, revealed that although postsecondary administrators strongly supported the program at that time, the policies were not "uniformly accepted, interpreted, nor implemented." Specifically, two postsecondary institutions were found to have not complied with a clear policy directive adopted by the Minnesota State Colleges and Universities.⁷

Similarly, Colorado statute mandates that students pay tuition up front and that the school districts reimburse them upon successful completion of courses. According to a 2001 report of the state auditor, "Postsecondary Programs for High School Students: Performance Audit," however, successful completion is not clearly defined and potentially causes issues when students attempt

to transfer credits. Specifically, at most colleges and universities, successful completion of a course is considered to be a grade of C, but because the school districts do not have a consistent definition, they are sometimes reimbursing students if they earn any grade higher than an F.⁸

These are merely two examples of policy implementation concerns. A thorough analysis of practice in addition to this comprehensive audit would be particularly useful in understanding the true state policy landscape.

Conclusion

WICHE's comprehensive search of all 50 states' policies addressing accelerated learning options reveals some general trends. First, most states have policies related to accelerated learning options. Second, these policies vary considerably in terms of the breadth, depth, and scope of regulating accelerated learning programs. Third, states are more likely to have adopted policy related to dual/concurrent enrollment than any of the other three accelerated learning options. Finally, state policy related to accelerated learning options tends to reside in state statute rather than board policy.

With regard to each of the accelerated learning options examined for this report, more specific findings emerged that are worth noting.

Advanced Placement

1. Thirty-two states have adopted state-level policy related to AP: of those, 29 states have legislation, and 10 have board policy.
2. Many of the state policies related to AP define it and describe its function, but those states that have such policies also have others that build on this definition.
3. In an effort to afford economically disadvantaged students the opportunity to benefit from AP examinations, several states have adopted policies that focus on test fee reimbursement for low-income students.
4. Rather than focusing on students in need, a few states have opted to reward students for performance on AP examinations.
5. Recognizing the importance of having a high-quality, skilled teacher in the classroom, states have adopted policies to ensure that those who teach AP courses are qualified to do so, most often through College Board-sponsored training.

Dual/Concurrent Enrollment

1. Forty-two states have adopted state-level policy related to dual/concurrent enrollment: of those, 40 states have legislation, and 15 have board policy.
2. States vary widely in terms of the breadth and depth of regulating dual/concurrent enrollment.
3. The details of participation requirements vary by state. But, in general, they include minimums for class standing, grade point average, class rank, and score on a standardized test; additional requirements involve securing a recommendation from an administrator; completing an application form; and meeting specified institutional requirements or course prerequisites.
4. Thirty-one states have policy that specifies how dual/concurrent enrollment credit is applied.
5. States vary widely in how they fund dual/concurrent enrollment programs and courses: some states assume the cost, some school districts or schools carry the burden, and in other cases, students and their parents pay for participation.
6. Twelve states require information about dual/concurrent enrollment to be provided to all students. One state - Oregon - has opted to specifically reach at-risk students.
7. Ten states have built institutional accountability mechanisms into their state policies.

International Baccalaureate

1. Of the four accelerated learning options analyzed, the IB program is the one that appears in policy in the smallest number of states, only 12: of those, all have legislation, and two states have board policy.
2. Where they occur, policies concerning IB are often linked to policies on AP.

Tech-Prep

1. Thirteen states have adopted state-level policy through legislation related to Tech-Prep.
2. State policy concerning Tech-Prep appears to be less comprehensive than policy related to the other accelerated learning options.
3. The trend in state policy appears to be moving away from adopting laws related to Tech-Prep.

All of these policies examined together demonstrate the complexity surrounding the different state goals and strategies for the implementation of accelerated learning options programs. States considering adopting policy related to any of these options would benefit from thoroughly understanding the context and environment in which these programs exist and operate.

Endnotes

- ¹ Calvin M. Frazier, *Dual Enrollment: A Fifty-State Overview* (Seattle: Institute for Educational Inquiry, October 2000), 4.
- ² Demarée Michelau, “Postsecondary Enrollment Options Programs,” *State Legislative Report* (Denver: National Conference of State Legislatures, 2001), 3.
- ³ The federal definition of advanced placement for the purposes of providing grants to states to support both activities and test fees for low-income students includes the College Board’s Advanced Placement program, International Baccalaureate, and other programs approved by the secretary.
- ⁴ Clifford Adelman, *The Toolbox Revisited: Paths to Degree Completion from High School through College* (Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 2006).
- ⁵ Nancy Hoffman, *Add and Subtract: Dual Enrollment as a State Strategy to Increase Postsecondary Success for Underrepresented Students* (Boston: Jobs for the Future, April 2005), 3.
- ⁶ Thomas Bailey and Melinda Mechur Karp, *Promoting College Access and Success: A Review of Credit-Based Transition Programs* (Washington, D.C.: U.S. Department of Education, Office of Vocational and Adult Education, November 2003), 21.
- ⁷ Minnesota Office of Internal Auditing, Minnesota State Colleges and Universities, “Post-Secondary Enrollment Options Program” (July 17, 2001), 25, accessed on January 5, 2006, at <http://www.mnscu.edu/media/publications/pdf/pseo_audit_rpt2001.pdf>.
- ⁸ Office of the Colorado State Auditor, *Postsecondary Programs for High School Students: Performance Audit* (June 2001), 2, accessed on January 5, 2006, from <[http://www.leg.state.co.us/OSA/coauditor1.nsf/All/CEE288A917503B4287256E74006963DD/\\$FILE/1336PostSecondaryPerfFY01.pdf](http://www.leg.state.co.us/OSA/coauditor1.nsf/All/CEE288A917503B4287256E74006963DD/$FILE/1336PostSecondaryPerfFY01.pdf)>.

Policies and Practices at Postsecondary Institutions

Colleen O. Sathre and Cheryl D. Blanco

The impact of accelerated learning coursework on a student’s acceptance into and progression through a postsecondary institution is difficult to measure but extremely important in any discussion of how to increase the number of low-income and underrepresented students participating in accelerated learning options. This study used two research activities – an institutional online survey and a transcript analysis – as tools to collect new information and shed light on how accelerated learning credits are accepted and used by colleges and universities. Several questions guided the collection of information for this chapter, and the findings are discussed under three general topics:

- General institutional policies, practices, and responsibilities.
- Admissions and receipt of postsecondary credit.
- Outreach programs, financial aid, and collaboration with high schools.

A more complete paper on the institutional policies and practices survey is contained in Appendix C, including the methodology and a copy of the online survey instrument developed and administered for this study.

With the exception of a recent study conducted by the U.S. Department of Education’s National Center for Education Statistics (NCES) and work by the Learning Productivity Network at the University at Buffalo, the literature is nearly void of studies on the policies and practices of postsecondary institutions concerning accelerated learning options.¹ The NCES report was released after the online survey of postsecondary institutions for this study was prepared. While the general thrust of some questions was similar, the surveys in the three reports have limited points of comparison due to the manner in which questions and answer options were phrased. Nonetheless, the studies complement each other on several points and provide a baseline for further research on institutional policies and practices related to accelerated learning.

General Institutional Policies, Practices, and Responsibilities

Written Policies

Knowing whether postsecondary institutions have written policies concerning accelerated learning was an important first step in developing a picture of what

happens to students’ accelerated credits at this level. A related interest was whether institutions consider any of the four accelerated learning options for purposes of admissions or credit requirements. This study indicates that the majority of institutions have policies for some, but not all, of the accelerated programs examined in this project. And institutions tend to take the credit earned by a student into consideration during the admissions process. However, the proportion of institutions with policies varies considerably when institutional characteristics such as control (public or private) and type (Carnegie classification of research/doctoral, baccalaureate/master’s, or associate’s) are considered, as well as the specific accelerated learning program.

Among the four types of accelerated learning options considered in this study, institutions generally are most likely to have policies concerning the acceptance of Advanced Placement (AP) credit: 91 percent reported having written AP policies, with research/doctoral institutions and baccalaureate/master’s institutions more likely than associate’s colleges to have written AP policies (see Table 3.1).

Table 3.1. Does the institution have written policies concerning the acceptance of accelerated learning options?

Accelerated Option	Public	Private	All	Rsch./ Doc.	Bacc./ Master’s	Assoc.
AP	91%	93%	91%	97%	96%	87%
Dual/concurrent enrollment	91%	67%	83%	73%	76%	93%
IB	38%	59%	45%	85%	62%	18%
Tech-Prep	59%	12%	43%	22%	16%	79%

The existence of written dual/concurrent enrollment policy is more prevalent in the public than the private sector and is more common at associate’s colleges than at research/doctoral or baccalaureate/master’s institutions.

The International Baccalaureate (IB) Diploma Program is much more recently available in the nation’s high schools, and recognition in postsecondary institutional policy is not as widespread as either AP or dual/concurrent enrollment programs. Less than half of all institutions report having written IB policies, with research/doctoral institutions (both public and private) the most likely to report such policies. Nearly all private research/doctoral universities have written IB policy.

Less than half of all institutions have Tech-Prep policies, but they are found at associate's colleges to a much larger degree than at research/doctoral or baccalaureate/master's institutions.

Consideration of Accelerated Learning Credit During Admissions

While written policies are relatively widespread, there is more variability in practice among institutions when it comes to considering the accelerated options for purposes of admission or credit requirements. Here, the differences between public and private institutional practices are more apparent (see Table 3.2). For example, 94 percent of private institutions take AP into account during the admissions process, compared to 89 percent of public institutions. When dual/concurrent credit is examined, the proportions are reversed: public institutions are more likely to consider dual/concurrent credits during admissions than are private institutions. A similar distinction exists for Tech-Prep credit, where publics are likely to consider it, but privates are not.

Among private institutions, IB credit is likely to be considered during admissions, but less than one-half of public institutions are likely to consider it during admissions.

Table 3.2. Does the institution consider any accelerated learning option for purposes of admission and/or credit requirements?

Accelerated Option	Public	Private	All	Rsch./ Doc.	Bacc./ Master's	Assoc.
AP	89%	94%	91%	97%	95%	86%
Dual/concurrent enrollment	91%	73%	85%	78%	82%	90%
IB	43%	66%	51%	85%	70%	23%
Tech-Prep	60%	16%	45%	23%	21%	77%

Institutional type (research/doctoral, baccalaureate/master's, or associate's) is also related to differences in whether accelerated learning credit is considered during admissions. As Table 3.2 shows, the variations across institutional type are less pronounced with AP and more prevalent with dual/concurrent enrollment, IB, and Tech-Prep. Most institutions (91 percent), regardless of type, consider AP during admissions. Associate's colleges are more likely than baccalaureate/master's or research/doctoral institutions to consider dual/concurrent credit during the admissions process. The reverse pattern is apparent for IB credit, as 85 percent of research/doctoral and 70 percent of baccalaureate/master's institutions consider the IB at admissions, compared to 23 percent of associate's colleges. Much larger differences are seen for Tech-Prep courses, with most associate's colleges and few other institutional types considering Tech-Prep.

In a paper published in 2000, researchers B. D. Johnstone and B. Del Genio also reported that postsecondary institutions were willing to accommodate college-level learning in high schools. When asked to select a statement that best described the institution's policy toward admitting freshmen with successful AP experiences from high school, 84 percent chose the statement: *"We encourage the use of AP credits, some of which can substitute for other requirements and allow either for early graduation, for double majors, or for more elective exploration."*²

Making and Applying Accelerated Learning Policy in the Institution

Who makes accelerated learning admissions policy? Shifting from the existence of written policies and the types of practices the institutions employ, the study also sought to understand who has responsibility for accelerated learning credit policy — who makes the policy and who applies it?

Institutions invest the responsibility for determining accelerated learning admissions policy among many different institutional officers. The most frequently identified individual is the chief academic officer (CAO), with slightly more than one-third of all responding institutions identifying the CAO for this role. For the remaining two-thirds of institutions, responsibility for setting accelerated learning admissions policy may be assigned to admissions officers/registrars, the faculty, and various academic and administrative officers functioning in their individual capacities or in blended committees.

There are important differences in who makes policy when institutional control and institutional type are considered (see Table 3.3). Acknowledging that the CAO is the primary authority in most institutions, private institutions also tend to vest this responsibility in other officers or individuals more so than do public institutions. Institutions vary even more markedly by type. Research/doctoral institutions report relying on admissions officers and registrars to determine

Table 3.3. Who determines the accelerated learning admissions policy?

	Public	Private	All	Rsch./ Doc.	Bacc./ Master's	Assoc.
Chief academic officer	37%	31%	36%	20%	31%	46%
Admissions officer/ registrar	6%	23%	16%	25%	19%	10%
Faculty	9%	20%	13%	15%	21%	4%
Dean/department chair	6%	6%	6%	7%	6%	6%
Other/blended committee	14%	14%	14%	17%	15%	12%
All other	19%	7%	15%	15%	8%	22%

accelerated learning admissions policy more than do other types of institutions, with CAOs the second most-identified individual. Baccalaureate/master’s institutions identify the CAO most frequently, while faculty members or committees are the second largest groups identified for determining these admissions policies. Associate’s colleges rely most heavily on the CAO for these policies.

Who decides how accelerated learning credit is treated during admissions? Having identified the key policy person at the institutions, the survey turned to implementation issues and the matter of who decides how accelerated learning credit is treated in the admissions process. In general, this responsibility is vested in three groups: admissions officers, chief academic officers, and a cluster that includes faculty and academic administrators acting as individuals or in various committees.

Patterns similar to those seen above for policy determination are less evident in policy implementation when results are disaggregated by institutional control (see Table 3.4). Public and private institutions rely on admissions officers and registrars to *implement* accelerated learning policy in the admission process, while the CAO was the primary person to *make* policy in this area.

Table 3.4. Who determines how accelerated learning credit is treated in the admissions process?

	Public	Private	All	Rsch./ Doc.	Bacc./ Master's	Assoc.
Chief academic officer	29%	25%	29%	17%	23%	38%
Admissions officer/ registrar	33%	36%	34%	41%	35%	31%
Faculty	5%	10%	7%	14%	9%	2%
Dean/department chair	9%	13%	11%	10%	14%	7%
Other/blended committee	9%	11%	10%	10%	12%	8%
All other	13%	6%	10%	9%	7%	15%

Accelerated learning policy implementation at research/doctoral and at baccalaureate/master’s institutions is handled primarily by admissions officers and registrars. At associate’s colleges, policy implementation is most often the domain of the CAO. At research/doctoral institutions, the admissions officer/registrar is responsible for both determining accelerated learning policy and implementing it in the admissions process. At baccalaureate/master’s institutions, these responsibilities are housed in different offices (Tables 3.3 and 3.4).

Who decides how accelerated learning credit applies?

A third important step in this process – after policy setting and policy implementation in the admissions process – involves the responsibility for determining

how accelerated learning credit is *applied* to student records. This study found that responsibility for determining how accelerated learning credit actually applies to student records is even more dispersed than is the authority for determining policy and the implementation of the policy in the admissions process.

While the CAO is the most frequently identified individual for determining how accelerated learning credit is to be applied, only 23 percent of respondents across all institutions gave this response (see Table 3.5). A variety of officers, including admissions, department chairs, deans, faculty, and registrars, vied for second place, at levels of less than 20 percent. These results suggest that the responsibility for deciding how accelerated learning credit will apply to the student’s record is dispersed broadly in the institution. This is a critical decision point from the student’s perspective, as this may be the time when the student receives the type and amount of credit he or she thought would be granted for AP, dual/concurrent, IB, or Tech-Prep courses taken while in high school.

Table 3.5. Who decides how accelerated learning credit will apply?

	Public	Private	All	Rsch./ Doc.	Bacc./ Master's	Assoc.
Chief academic officer	23%	22%	23%	3%	18%	35%
Admissions officer	22%	7%	17%	19%	11%	22%
Department chair	12%	14%	13%	12%	20%	5%
College/school dean	10%	15%	12%	22%	11%	10%
Faculty	8%	13%	10%	24%	11%	5%
Registrar & others	9%	20%	13%	5%	19%	8%
Blended committee	8%	6%	7%	12%	7%	6%
All other	7%	3%	6%	3%	3%	10%

Since the decision about how accelerated credit is actually applied for transcript purposes is an important decision point for the student, the survey probed a little further to determine if the authority for determining how accelerated learning credit is applied varies by program and college or if it remains consistent throughout the institution. In most institutions, the authority for deciding how this credit will be applied is consistent. In one-third of the institutions, however, the authority may vary by program or department within a school or college (see Appendix C, Table C.8).

Both control and type reveal sharp differences in institutional authority for who decides how accelerated learning credit applies. Consistency in authority for accelerated credit application is more prevalent among public institutions than privates. Forty percent of the private institutions report that the authority may vary by program or department and by college or school. Research/doctoral institutions are about equally

split on the degree of consistency and variation in who has decision-making authority to determine how accelerated credit is applied. Baccalaureate/master's and associate's institutions are more likely to report that this authority is consistent within the institution.

In summary, it is very common for higher education institutions to have AP and dual/concurrent enrollment policies, but less common for institutions to have IB and Tech-Prep policies. Accelerated learning policy and practice go together; institutions that engage in the practice of considering accelerated learning options for purposes of admissions nearly always have written policies. Within the higher education community, there frequently is not a common institutional source of responsibility for determining accelerated learning policy, deciding how that credit is treated in the admissions process, or determining how the credit is applied to the student record. These responsibilities may be handled by chief academic officers, admissions officers, registrars, department chairs, deans, faculty, faculty/administrative committees, and other administrators, and in some cases involve system and state officers.

Having established a picture of general policies and practices related to accelerated learning credit, this chapter now moves to a more detailed examination of participation requirements, whether accelerated learning credit enhances admissions prospects, the type of credit awarded, and when students might learn the results of decisions made.

Admissions and Receipt of Postsecondary Credit

There are several decision points at the institutional level concerning accelerated learning credit. Key areas involve the admissions process and determining whether credit for accelerated courses is awarded and how. Additional concerns include whether having taken accelerated courses enhances a student's chances of entry to the institution and when the student is informed of the institution's decision about the application of accelerated credit. This section summarizes responses to several survey questions seeking more detailed information on these aspects of postsecondary institutional policies and practices.

Minimum Requirements for Participating in Dual/Concurrent Courses

The literature on accelerated learning infrequently takes into account the higher education community's involvement in dual/concurrent enrollment programs. The common perception is that accelerated learning is the domain of secondary education, yet effective dual/concurrent enrollment programs rely on strong

collaboration between secondary education and postsecondary education.

The three primary institutional requirements for students to participate in dual/concurrent enrollment are:

- Recommendation from a high school counselor, teacher, or principal.
- Class standing as a junior or senior.
- A specific high school grade point average (GPA).

The most frequently cited requirement was the need for a recommendation from a counselor, teacher, or principal: two out of three institutions said that a recommendation from the high school was a minimum requirement (see Table 3.6). Nearly as many respondents also indicated that class standing was a necessity. Fewer than half cited high school GPA as a requirement. Under "other" requirements, several institutions reported test score performance and mentioned SAT, PSAT, ACT, Asset, Compass, and other placement tests. A few institutions specified requirements such as an interview, course prerequisites, parental/guardian consent, instructor permission, age, or class rank. Only 11 percent had no minimum requirement for participation in a dual/concurrent enrollment course.³

Table 3.6. Does the institution have minimum requirements for a high school student to participate in dual/concurrent enrollment programs?

	Public	Private	All	Rsch./ Doc.	Bacc./ Master's	Assoc.
Recommendation	75%	49%	66%	46%	61%	78%
Class standing as a junior or senior	67%	49%	61%	46%	57%	70%
High school grade point average	49%	33%	44%	39%	44%	45%
No minimum requirements	7%	19%	11%	17%	15%	6%
Other/test scores	20%	10%	17%	12%	15%	19%
Other	13%	21%	16%	31%	17%	11%

Public institutions require minimum participation criteria for dual/concurrent enrollment more often than do private institutions. The top two requirements among public institutions were the high school recommendation and class standing. Among private institutions, just under half listed these same two minimum requirements.

Institutional type reveals clear differences in minimum requirements for enrollment in dual/concurrent courses. Associate's colleges require minimum criteria for participation to a greater extent than do other types of institutions. These colleges reported the highest percentages for the top two requirements: 78 percent of these colleges require a recommendation from the high school, compared to 61 percent of

baccalaureate/master’s and 46 percent of research/doctoral institutions. Class standing is also more important to associate’s colleges, as most require at least junior or senior status, while over one-half of baccalaureate/master’s institutions and nearly one-half of research/doctoral institutions indicate it is a minimum requirement.

Enhanced Admissions Prospects

One of the many reasons that high school students take accelerated learning courses is to increase their competitiveness in the admissions process and enhance their admissions prospects. The College Board, which owns and markets AP courses and examinations, encourages this attitude. On its website, the organization tells students to sign up for AP to “gain the edge in college preparation” and to “stand out in the college admissions process” by:

- Demonstrating maturity and readiness for college.
- Showing willingness to push yourself to the limit.
- Emphasizing commitment to academic excellence.⁴

Thus, an important question concerning institutional practice is whether evidence of participation in accelerated learning options actually improves a student’s chance for admission.

Across the spectrum of higher education institutions, accelerated learning options, indeed, do appear to have limited impact on enhancing admissions prospects at most institutions (see Table 3.7). While nearly one in three institutions replied that accelerated learning enhances a student’s chances for admission, the percentages vary for public and private institutions. Private institutions are far more likely than public institutions to enhance admissions prospects for students who have taken AP, dual/concurrent enrollment, or IB.

The type of institution also appears to make a difference. Citing their roles as open-admissions institutions, few associate’s colleges give students with accelerated learning extra consideration in the admissions process. On the other hand, accelerated options are taken into account at many of the more selective institutions. Over half of research/doctoral institutions and somewhat less than half of baccalaureate/master’s institutions acknowledge that AP credit on a transcript enhances a student’s chances of admission; having taken dual/concurrent courses is less likely to enhance admission at these institutions. Credit from IB courses did make a difference at one-half of the research/doctoral institutions in the study and at one-third of the baccalaureate/master’s institutions. Thus, it would appear that more selective institutions value AP and IB more than baccalaureate/

master’s institutions do. In comments, one institution noted that while these experiences are not factored into basic admissions requirements, they would likely work to a student’s benefit in the case of an appeal. Another college said that they may be a factor in individual cases.

Table 3.7. Beyond adding weight to a student’s high school GPA, does evidence of participation in any accelerated learning option enhance a student’s chance for admission?

Accelerated Option	Public	Private	All	Rsch./Doc.	Bacc./Master’s	Assoc.
AP	21%	48%	30%	58%	43%	9%
Dual/concurrent enrollment	18%	32%	23%	32%	32%	10%
IB	15%	34%	22%	51%	32%	2%
Tech-Prep	6%	4%	5%	2%	5%	7%

In summary, private institutions indicate that three forms of accelerated learning - AP, dual/concurrent enrollment, and IB - may enhance a student’s admissions prospects. Public institutions are less inclined to enhance admissions prospects for students with these credits. Additionally, research/doctoral universities are more likely to provide special admissions consideration for AP and IB credit than are other types of institutions.

Preference for Performance in Advanced Placement Courses

Acceptance of AP credit at the postsecondary institution is usually tied to the score a student achieves on a subject area test. Generally, if a student receives a score of 3 (qualified), 4 (well qualified), or 5 (extremely well qualified) on the subject examination, colleges and universities will accept that course, although institutions may have different threshold scores for awarding credit for individual subject tests. The College Board tells students that “through AP Exams, you have the opportunity to earn credit or advanced standing at most of the nation’s colleges and universities. At many of these institutions, you can earn up to a full year of college credit (sophomore standing) through a sufficient number of qualifying AP Exam grades.”⁵ The website also links to colleges and universities with AP credit policy information. Because some institutions are challenging this practice, this study probed this issue.

The survey asked if, other factors being equal, the institution gives preference for admissions purposes to a student who takes AP courses. The question was defined in four ways. First, are students who take AP given preference without regard to the grade achieved? Second, are students whose high school GPAs

were enhanced by participating in AP courses given preference? Third, are students who have taken AP courses and performed satisfactorily using standards defined by the institution given preference? And fourth, are students given preference who have taken AP tests and performed satisfactorily using the standards defined by the College Board (received a grade of 3, 4, or 5)?

In the first instance, only about one in 10 institutions gives preferential admissions consideration to students who take AP courses, regardless of the grade achieved (see Table 3.8). For the remaining three scenarios, the proportion of all institutions that give preferential consideration ranges only from 25 to 30 percent. Key differences emerge, though, when the results are disaggregated by control and type. Close to one-half of private institution respondents indicated that preference is given if students performed satisfactorily under institutional or College Board standards. At privates, these percentages dropped significantly for students whose GPA had been enhanced by the AP course or if the grade is not taken into account.

Table 3.8. Does the institution give preference for admissions purposes to a student who took AP and met certain standards?

	Public	Private	All	Rsch./ Doc.	Bacc./ Master's	Assoc.
Met institutionally defined standards	21%	46%	30%	63%	40%	9%
Met College Board defined standards	20%	46%	29%	53%	42%	8%
High school GPA enhanced by AP	19%	38%	25%	37%	40%	6%
AP courses without regard for grade	7%	22%	12%	19%	17%	4%

Among public institutions, the percentages for all four conditions were much lower. Only about one in five public institutions gives admissions preference even if institutional and College Board standards are met or if the high school GPA is enhanced. Rare is the public institution that gives admissions preference regardless of the grade achieved.

Whether the institution is a research/doctoral, baccalaureate/master's, or associate's college also makes a difference when it comes to preferential admissions for AP students. Students are most likely to receive special consideration for their AP credit at research/doctoral institutions if institutional or College Board standards are met. Approximately 40 percent of the baccalaureate/master's institutions give admissions preference when any standard is met or the high school GPA is enhanced. Reflecting their open admissions mission, few associate's colleges give admissions preference under any of the conditions proposed.

In sum, students are encouraged to take AP courses to enhance their chances for admission to a college or university. Yet their expectations may not be matched by institutional practice.

Informing Students about the Acceptance and Application of Accelerated Learning Credit

When credit is accepted. If students use accelerated learning to leverage their chances of getting into their first-choice or preferred college or university, then additional institutional decision points become very important. If students know in advance (1) that their accelerated credit is accepted; (2) that it applies; and (3) whether it will be accepted for elective or required credit, this information may influence where they decide to enroll. The survey provided five alternatives for when a student is informed about the acceptance and application of accelerated learning credit.

- Before an offer of admission is made.
- At the time an offer of admission is made.
- After admission is offered, but before the student has enrolled.
- After the student is enrolled.
- Other.

From the student's perspective, knowing before or at the time an admissions offer is made would maximize his or her opportunity to use the information in making a decision. However, that does not appear to be the time most institutions tell students whether their accelerated credit is accepted: 43 percent inform students if their credit is accepted after the admissions offer has been made but before the student has enrolled (see Table 3.9). Institutions rarely share this information before an admissions offer is made or at the time of the admissions offer. Seventeen percent of all institutions do not inform students if their accelerated credit is accepted until *after* the student is enrolled. Comments on some returned surveys indicate that performance criteria are published or available on websites, and it becomes the student's responsibility to find out about the status of the credits:

- "All information is published in our catalog and on our academic testing website."
- "Explained in course catalog."
- "Upon inquiry by student."
- "The student knows how the credit has been applied when he/she views the grade report at the end of the semester."

Table 3.9. When is a student with accelerated learning credit informed that the credit is accepted by the institution?

	Public	Private	All	Rsch./ Doc.	Bacc./ Master's	Assoc.
Before an offer of admission is made	10%	15%	12%	5%	13%	11%
At the time an offer of admission is made	16%	14%	15%	15%	15%	16%
After an offer of admission and before student enrolls	39%	51%	43%	58%	51%	30%
After the student has enrolled	19%	14%	17%	12%	11%	26%
Other	16%	6%	13%	10%	10%	17%

Public institutions are less likely than private institutions to inform students before they enroll whether the accelerated credit is *accepted*: 65 percent of publics inform students before or at the time of an admissions offer or after the offer is made and before the student enrolls, compared to 80 percent of private institutions. Research/doctoral and baccalaureate/master's institutions act similarly on the timing of the information — over half wait until an admissions offer has been extended but before the student has enrolled.

When and how credit is applied. The student normally finds out *how* the credit is *applied* when the admissions offer is extended but before enrollment occurs, although nearly one-third of the institutions wait until after the student has enrolled to provide that information. There is little variation on this between public and private institutions or among research/doctoral, baccalaureate/master's, and associate's institutions.

Related to the question of *how* accelerated credit is applied is whether it is applied as elective or required credit. This distinction is significant for most students. *Elective* credits count toward the total number of credits required for the completion of a credential (a degree, certificate, or diploma), but are not designated as specific general education, college/school, major, or other course requirements. Contrarily, *required* credits are those associated with courses that are specifically required to fulfill general education, college/school, major, or other course requirements.

Institutions are more inclined to apply both elective and required credit for AP and dual/concurrent enrollment and less inclined to do so for IB and Tech-Prep (see Table 3.10). Colleges and universities lean toward required credit: almost all institutions grant AP as required credit, while more than three-fourths grant it as elective credit. The percentages dip slightly for dual/concurrent enrollment granted as required or elective credit. IB courses are less likely than either AP or dual/concurrent courses to be granted as either

elective or required credit by all institutions. Only about 40 percent of all institutions grant elective or required credit for Tech-Prep. When institutional control is considered, the private sector is more likely to award elective or required credit for IB courses, and the public sector is more likely to do so for dual/concurrent enrollment.

Table 3.10. Does the institution grant elective or required college credit for accelerated learning options?

Accelerated Option	Elective			Required		
	Public	Private	All	Public	Private	All
AP	75%	80%	77%	91%	92%	91%
Dual/concurrent enrollment	77%	67%	73%	92%	78%	87%
IB	39%	60%	46%	40%	63%	48%
Tech-Prep	48%	20%	39%	53%	12%	39%

Accelerated Option	Elective			Required		
	Rsch./ Doctoral	Bacc./ Master's	Assoc.	Rsch./ Doctoral	Bacc./ Master's	Assoc.
AP	83%	80%	73%	97%	93%	88%
Dual/concurrent enrollment	73%	73%	76%	80%	85%	92%
IB	80%	61%	20%	81%	63%	23%
Tech-Prep	25%	23%	60%	14%	15%	73%

All types of institutions are somewhat more likely to apply AP, dual/concurrent enrollment, and IB credit as required than as elective credit.

The unique nature of the IB diploma and how it is viewed by postsecondary institutions was of interest in this study, and a separate question was asked concerning whether the institution accepts an IB diploma as equivalent to any college-level work. Surprisingly, one-half of all institutions apparently do not accept the IB diploma as equivalent to college-level work (see Table 3.11). Among those colleges and universities that do, privates are more inclined than publics to accept the IB diploma as equivalent to college-level work. Nearly one-half of privates accept this diploma for the first year of college, compared to only 24 percent of public institutions. Few public or private institutions accept the IB diploma for the first two years of college.

Table 3.11. Does the institution accept an International Baccalaureate diploma as equivalent to any college-level work?

	Public	Private	All	Rsch./ Doc.	Bacc./ Master's	Assoc.
First year of college only	24%	45%	31%	41%	43%	16%
First and second year of college	14%	16%	15%	10%	17%	14%
The institution does not accept an IB diploma as equivalent to college-level work	62%	39%	54%	49%	40%	71%

Nearly half of research/doctoral and 40 percent of baccalaureate/master's institutions do not accept the IB diploma as equivalent to any college-level credit. Among those that do accept this credit, most accept it as first-year credit only.

To summarize this section, the way institutions accept and treat accelerated learning credit varies widely. It appears that across all higher education institutions, participation in accelerated learning options has limited impact on admissions prospects. Private research/doctoral institutions are the most likely to enhance admissions prospects for those who meet AP performance standards or those who have taken dual/concurrent or IB courses. The public sector is more likely than the private to have minimum requirements for dual/concurrent enrollment. Two-thirds to nearly three-fourths of all institutions inform students at some point before enrollment about the acceptance and application of accelerated learning credit, and even larger shares of institutions accept AP and dual/concurrent enrollment courses for elective or required credit. Tech-Prep courses are the least likely to be accepted for credit, except at public associate's colleges. The acceptance of IB for elective or required credit is fairly common within the four-year higher education community, but it is less likely that these institutions will accept IB as equivalent to the first year or first and second years of college.

In the final section of this chapter, additional aspects of institutional policies and practices explore higher education's efforts related to outreach programs, financial aid, and collaboration with high schools.

Outreach Programs, Financial Aid, and Collaboration with High Schools

Prevalence of Outreach Programs

Accelerated learning options are often a collaborative effort between K-12 and higher education, and the availability of outreach programs may be a signal to students of opportunities to engage in high-quality learning experiences that may translate into college credit. In order to measure the presence of this kind of cooperation across educational levels, the study asked if institutions have an outreach program to notify students, particularly those from low-income or disadvantaged backgrounds, about opportunities for accelerated learning options.

Slightly over one half (54 percent) of all institutions responded affirmatively to this question, but the difference between public and private institutions was notable: two-thirds of public institutions have outreach programs, compared to one-fourth of privates (see Table 3.12). There are distinct differences on this item by institutional type. While research/doctoral

institutions were nearly evenly split between those who reach out to disadvantaged high school students and those who do not, nearly two-thirds of *all* baccalaureate/master's institutions do not reach out. However, *public* baccalaureate/master's institutions were more than twice as likely as their private counterparts to have outreach programs. Associate's colleges were the most likely to have such programs: nearly three-quarters of these respondents reported having an outreach program for disadvantaged students (see Appendix C Figure 34).

Table 3.12. Does the institution have an outreach program to notify students, particularly those from low-income, disadvantaged backgrounds, about opportunities for accelerated learning options?

	Public	Private	All	Rsch./ Doc.	Bacc./ Master's	Assoc.
Yes	68%	27%	54%	49%	38%	73%
No	32%	73%	46%	51%	62%	27%

The NCES survey took a slightly different approach to determine the range and presence of outreach efforts. Institutions with dual enrollment programs were asked whether they had a formal dual enrollment program specifically for at-risk high school students. The federal study noted that colleges and universities "have developed programs for at-risk students as a way of promoting high school retention as well as enthusiasm for education among a population of students at risk of complete withdrawal from the education system."⁶ The NCES found that only 5 percent (110 institutions) of the estimated 2,050 institutions with dual enrollment programs during academic year 2002-03 had dual enrollment programs specifically geared toward high school students at risk of education failure, with approximately 6,400 students enrolled in these programs.⁷

Perhaps the best on-going state-level source for information on programs that direct their work toward at-risk students is the APASS (Academic Pathways to Access and Student Success) website (www.apass.uiuc.edu), which monitors special efforts to reach underserved students. Information for the four accelerated options included in the current study shows the following:

- **AP:** All states report offering AP, and only six of the 50 states indicated that they did not make special efforts to reach underserved students with AP. Most states with such initiatives target low-income students. A few also identify other underserved student populations, such as low-achieving students, rural and urban students, racial and ethnic minority students, and first-generation students. Those states that have no special initiatives for underserved students report that their efforts serve all students.

- **Dual/Concurrent Enrollment:** All states report offering dual credit/dual enrollment, but only slightly more than half (29 states) have special efforts to reach underserved students with this option. Targeted groups may involve students who are home schooled, low income, racial/ethnic minorities, rural, urban, disabled, low achievers, traditionally not college bound, incarcerated, or first generation.
- **IB:** 45 of the 50 states have IB programs in at least one high school. Of those states, more than half (25 states) have no special outreach effort for underserved students. The most frequently cited targeted groups were racial and ethnic minorities and low-income students.
- **Tech-Prep:** Available in all 50 states, Tech-Prep programs also tend to provide special outreach for underserved students; only 11 states report no such initiatives. As with the other options, most states target low-income students through Tech-Prep. Other underserved populations reported include students who are low achievers, rural, urban, racial/ethnic minorities, ESL learners, disabled, and first generation. Some of the states with no special initiatives for underserved students report that their efforts serve all students.

Where Accelerated Learning Courses Are Taken

The location of accelerated learning courses can be a defining aspect of who takes them and, in some cases, the quality of the educational experience. Where the courses are taken varies by the type of accelerated option. Three of the four options examined in this study are offered predominantly at high schools: AP, IB, and Tech-Prep. For additional details on these options, please see Appendix C.

Institutions report that dual/concurrent courses are most often taken by students at college campuses, although many students also take these courses at high schools. The NCES study reported that 80 percent of institutions with dual enrollment programs offered these courses to high school students at their college campuses.⁸ This finding is similar to the 76 percent found in the current study.

In addition to the three-fourths of all institutions reporting that dual/concurrent courses are taken on college campuses, nearly two-thirds (63 percent) indicated that they are also taken at high schools. The public sector (84 percent) is more likely than the private sector (62 percent) to report college campuses as the location for dual/concurrent courses. And nearly three-fourths of public institutions report offering dual/concurrent courses at high schools, compared with 45 percent of private institutions. About one-

third (36 percent) of all institutions report that dual/concurrent courses are taken by means of distance learning; this is the only accelerated learning option for which institutions make significant use of this mode of delivery.

There are some differences in where students take dual/concurrent courses by institutional type. The likelihood of dual/concurrent courses being offered at high schools varies from a low of 41 percent for research/doctoral to 53 percent for baccalaureate/master's to a high of 82 percent for associate's colleges. More than 80 percent of associate's colleges offer these courses at both high schools and on college campuses.

The proportion of institutions that reported making dual/concurrent courses available via distance learning also varied by institutional type. Over one-half (58 percent) of the associate's colleges said students take dual/concurrent courses via distance learning, compared to about one-third of the research/doctoral institutions and less than one-fifth of the baccalaureate/master's institutions.

Opportunity for Financial Aid from a Postsecondary Institution

The most direct involvement of higher education in accelerated learning occurs with dual/concurrent enrollment. A recent national survey found that 48 percent of all Title IV degree-granting institutions had dual enrollment programs for high school students taking college courses during academic year 2002-03.⁹ Nationally, approximately 680,000 high school students took courses for college credit within dual enrollment programs that year, and 76 percent of these students were enrolled in public two-year institutions.¹⁰

A particular interest in the current study concerns the opportunity for economically disadvantaged students and those from underrepresented populations to participate in accelerated learning. Given financial barriers that many qualified students face, participation might be enhanced if colleges and universities help support the cost to the student of accelerated work. Thus, this survey sought to determine if institutions provide financial assistance specifically targeted for high school students from low-income, disadvantaged backgrounds who enroll in accelerated learning options. The choices for this survey item were:

- Full tuition waivers or discounts.
- Partial tuition waivers or discounts.
- Special institutional grants from earmarked funds in the operating budget.

- Special grants from external sources such as GEAR-UP.
- No student financial assistance is given.
- Other.

Half of all institutions provide some form of financial aid for high school students from low-income, disadvantaged backgrounds who enroll in accelerated learning options (see Table 3.13). The most common form, offered by nearly one-fourth of the institutions, is through special grants from external sources, such as GEAR-UP and Project GRAD. Partial tuition waivers or discounts accounted for the second most common form, at 22 percent. Few institutions provided full tuition waivers or discounts or special institutional grants from earmarked funds in the operating budget. In comments collected through the survey, respondents noted that scholarships may be provided through the institution's foundation, and tuition relief may be available from community groups and local grants. In a few cases, financial assistance comes in the form of aid for the cost of books for low-income students. But half of all respondents said that there was no financial assistance targeted specifically for high school students from low-income, disadvantaged backgrounds who enroll in accelerated learning courses.

Table 3.13. Does the institution provide financial assistance specifically targeted for high school students from low-income, disadvantaged backgrounds who enroll in accelerated learning options?

	Public	Private	All	Rsch./ Doc.	Bacc./ Master's	Assoc.
Full tuition waivers or discounts	17%	10%	14%	14%	11%	18%
Partial tuition waivers or discounts	21%	24%	22%	12%	25%	23%
Special institutional grants from earmarked funds in the operating budget	14%	9%	12%	5%	10%	17%
Special grants from external sources (e.g., GEAR-UP)	31%	10%	24%	19%	16%	33%
No student financial assistance is given	45%	59%	50%	59%	57%	39%
Other/aid not targeted	8%	6%	8%	3%	8%	9%

Public institutions are somewhat more likely to provide financial assistance to needy students for accelerated learning courses than are privates. Public institutions tend to use grants from external sources and various forms of tuition waivers/discounts, while private institutions rely more on partial tuition waivers or discounts. Associate's colleges tend to award financial aid to high school students from low-income, disadvantaged backgrounds who enroll in accelerated

learning options to a greater degree than do research/doctoral or baccalaureate/master's institutions. While associate's colleges use grants from external sources more than other sources, baccalaureate/master's institutions turn to partial tuition waivers or discounts. Many research/doctoral institutions do not provide this assistance; however, those that do use a variety of the options described above.

In summary, higher education institutions are involved with accelerated learning options through outreach programs and the provision of financial assistance to a limited degree. Slightly more than half of all institutions have accelerated learning outreach programs; they are more common in the public sector, and at associate's colleges. High schools are the usual site for AP, IB, and Tech-Prep courses. Dual/concurrent enrollment courses are offered at both high schools and college campuses; public associate's institutions are the primary users of distance education to deliver accelerated learning courses. Aid for low-income students from disadvantaged backgrounds enrolling in accelerated learning options is very limited. Half of all institutions give no aid, and the aid that is given is primarily from external grant programs, such as GEAR-UP.

Concluding Observations

As a research tool, the online survey of chief academic officers at public and private two- and four-year institutions across the U.S. provided new insights into how U.S. colleges and universities view and treat accelerated learning credit generated by AP, dual/concurrent enrollment, IB, and Tech-Prep. It is clearly impossible to use one stroke of the brush to describe institutional policies and practices, as there are significant differences among colleges and universities based on key characteristics, such as control (public or private) and type (research/doctoral, baccalaureate/master's, or associate's). The differences become even more diverse when various accelerated learning options are considered.

The final chapter of this report elaborates on challenges for all constituents and the potential for doing more with accelerated learning options, especially for increasing both access and success for disadvantaged students. Following are implications for students, educators, and policymakers.

Implications for Students

- Participating in accelerated learning options like AP, dual/concurrent, and IB courses may help admissions chances but is not a guarantee that admissions prospects will be enhanced. Because there is considerable variation in how public,

private, and different types of institutions treat these accelerated learning options, prospective students need to investigate admissions practices at the institutions they are interested in attending.

- Tech-Prep courses appear to have little impact on admissions. This may be because students taking Tech-Prep tend to enroll at open-door institutions.
 - If students are offered admission, they will likely find out if their accelerated learning work has been *accepted* before they actually enroll. Students tend to learn later in the admissions/enrollment process and may have to wait until after enrollment to learn how accelerated learning work will *apply* to their record. The timing of these actions varies considerably between the public and private sectors and by the type of institution a student seeks to attend.
 - Students need to be aware that institutions may give admissions preference to students taking AP courses and achieving certain performance standards, but these standards could be institution-specific or those established by the College Board. Practices vary between the public and private sectors and by type of institution.
 - High school students should be aware that if they want to take dual/concurrent enrollment courses, they will typically be required to: have a recommendation from a high school counselor, teacher, or principal; be a high school junior or senior; or have a specific grade point average.
 - Students can be confident that some AP and dual/concurrent courses will be accepted as required credit by a great majority of institutions in both the public and private higher education sectors. It is also common for postsecondary institutions to accept AP and dual/concurrent courses for elective credit.
 - If a student plans to attend public associate's institutions, there is a very good chance that his or her institution will accept Tech-Prep courses as required credit (half do); the chances of other types of institutions accepting Tech-Prep credit as required or elective are considerably lower.
 - If a student plans to attend a public or private research/doctoral institution or baccalaureate/master's institution, there is a good chance that his or her IB courses will be accepted for either elective or required credit. However, it is less likely that these institutions will accept the IB diploma as equivalent to the first year of college (and even more unlikely that other types of institutions will do so). And very few institutions accept the IB diploma as equivalent to the first and second years of college.
- Students should be aware that about half of all higher education institutions tend to assign a designation to accelerated learning credit to distinguish it from other transcript credit.
 - While no generalization applies across the board, larger institutions tend to be more involved with accelerated learning options than smaller institutions.

Implications for High School and Postsecondary Personnel

- Higher education personnel should ensure that websites, catalogs, and other vehicles are used to inform prospective students about the accelerated learning options their institution will consider for purposes of admissions or credit assignment. Every reasonable effort should be made to inform students of performance expectations, required documentation, and the timing of institutional admissions and credit assignment decisions.
- Importance should be placed on working with high school students to ensure that paperwork documenting accelerated learning course work is submitted to prospective institutions in a timely manner.
- Postsecondary education personnel should consider targeting some or additional financial assistance for students from low-income, disadvantaged backgrounds who enroll in accelerated learning options.
- The higher education sector should work with high schools to make sure that up-to-date information about financial aid is available. Since it is not common for higher education institutions to provide financial assistance specifically targeted for students from low-income, disadvantaged backgrounds enrolling in accelerated learning options, it is very important to make available information about those that do. An important service of "feeder" high schools is collecting information about the types of aid available at those institutions where their students tend to enroll and seek credit for accelerated learning courses. At a minimum, high school personnel should make students aware of the importance of finding out what, if any, aid might be available to support enrollment in various accelerated learning options.
- Postsecondary institutions that do not currently have outreach programs to inform students about accelerated learning should consider establishing such programs.
- Together, high school and postsecondary officials should review the locations where accelerated

learning is offered and consider whether alternative locations or distance education delivery would make accelerated learning options more attractive to low-income students while maintaining program quality.

Implications for Policymakers

- Public and private high school and postsecondary officials need to ensure that the community at large, government leaders responsible for funding public education, and private supporters understand what accelerated learning is, which institutions in their community make accelerated learning options available, and how it can improve preparation, reduce the time to degree, enhance workforce development, and use public funds more efficiently.
- Postsecondary officials should review where they place responsibility for determining their accelerated learning policy, the treatment of accelerated learning credit in the admissions process, and the determination of how accelerated learning credit is applied in order to ensure that their practices are coherent, are understood within the institution, and can be reasonably communicated to prospective students, parents, and policymakers.
- Postsecondary institutions that have considerable variation across programs and colleges for determining how accelerated learning credit applies should ensure that such practice is based on sound academic policy.
- Public funding officials should consider setting aside “pilot” or “performance” funding for high schools and postsecondary partnerships that demonstrate how accelerated learning options increase the admission of students from low-income backgrounds, reduce course-taking redundancy, and move students into the workforce or to degree completion in a timelier manner.
- Regional organizations such as WICHE might consider working with the postsecondary education community to develop accelerated learning standards of good practice. Such standards might encourage more institutions to publish performance criteria that make transparent their practices for accepting and applying accelerated learning courses.

Endnotes

¹ Where possible, analyses based on this study’s findings on institutional policies and practices related to dual/concurrent enrollment are compared with the 2005 NCES report titled *Dual Enrollment of High School Students at Postsecondary Institutions: 2002-03* and material from the Learning Productivity Network.

² Bruce D. Johnstone and Beth Del Genio, *College-Level Learning in High School: Purposes, Policies, and Practical Implications* (Buffalo, NY: Learning Productivity Network, University at Buffalo, Graduate School of Education, 2000), 28-29.

³ These findings vary somewhat from the study of dual enrollment at postsecondary institutions conducted by the National Center for Education Statistics (NCES). The NCES study queried institutions on “academic eligibility requirements,” which were broadly defined to include minimum high school GPA, score on a standardized test, passing a college placement test, high school class rank, recommendation or permission from a high school or a parent/guardian, course prerequisites, or essays.

⁴ The College Board, accessed on January 8, 2006, at <<http://apps.collegeboard.com/apcreditpolicy/index.jsp>>.

⁵ Ibid.

⁶ Brian Kleiner and Laurie Lewis, *Dual Enrollment of High School Students at Postsecondary Institutions: 2002-03* (NCES 2005-008) (Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 2005), 14.

⁷ Ibid., 15.

⁸ Ibid., 9.

⁹ Ibid., 4.

¹⁰ Ibid., 7.

Chapter 4

Follow the Students

Brian T. Prescott

Introduction

Proponents of accelerated learning options make many claims about how participation in such programs is related to success in education beyond high school. They draw on evidence that shows that students taking an academically rigorous curriculum stand a better chance of completing a postsecondary degree.¹ They also claim that accelerated learning options provide exactly that while offering exposed students an introduction to the college environment and academic performance expectations that help them succeed in college. They further argue that the college credits earned while still in high school enable accelerated learning participants to complete degrees faster, which offers the potential of considerable savings for themselves while reducing the strain on public resources.² Finally, they view accelerated learning as a way to provide a more seamless transition at the threshold of high school and postsecondary education, especially for students from traditionally underserved populations.³

But there is little empirical evidence to evaluate these claims. What research exists simply indicates that participation in accelerated learning options is strongly correlated with postsecondary access and success. But it falls short of establishing a causal link, and skeptics argue that the promises of accelerated learning programs have been largely illusory or unfulfilled.⁴

Meanwhile, the *Measuring Up 2004* report documented the leakage in the educational pipeline, estimating that only 18 out of 100 9th graders nationally will go on to complete an associate's degree within three years of high school graduation or a bachelor's degree within six years.⁵ Further, recent reports calling for increased alignment between K-12 and postsecondary education also emphasize the need to improve the rigor of the high school curricula in order to better prepare graduates for college and the global economy.⁶ In this climate, detailed analyses that examine what happens to students who participate in accelerated learning would be valuable contributions and provide useful guidance to policymakers trying to improve access and success in postsecondary education.

This chapter draws on an analysis of the secondary and postsecondary transcripts of Florida high school graduates to build a better understanding about the students who participate in accelerated learning programs and what happens to them after high school. It utilizes a transcript analysis approach to examine

how three accelerated learning options, Advanced Placement (AP), dual/concurrent enrollment, and International Baccalaureate (IB), are related to postsecondary participation, persistence, degree completion, and time to degree.⁷ The research addresses the following questions:

- What are the characteristics of students who participate in accelerated options?
- Is participation in accelerated options related to educational outcomes such as college-going, persistence, and degree completion?
- How does participation in accelerated options relate to a student's progress toward a postsecondary degree?
- Are there differences in these patterns based on income and race/ethnicity?

Due to the interest in using accelerated learning options as interventions for historically underrepresented groups of students, the analysis focuses in particular on low-income students and students of color.

The unusually rich unit-record dataset created for this project contained information about 734,467 students who graduated from Florida's public high schools between 1997 and 2003. It also contained information about any credit they earned for AP, dual/concurrent enrollment, and IB courses taken in high school and information about their experiences in Florida's public postsecondary institutions. Details about the methodology of the transcript analysis, as well as its limitations and additional results, are available in Appendix D.

Participation in Accelerated Learning

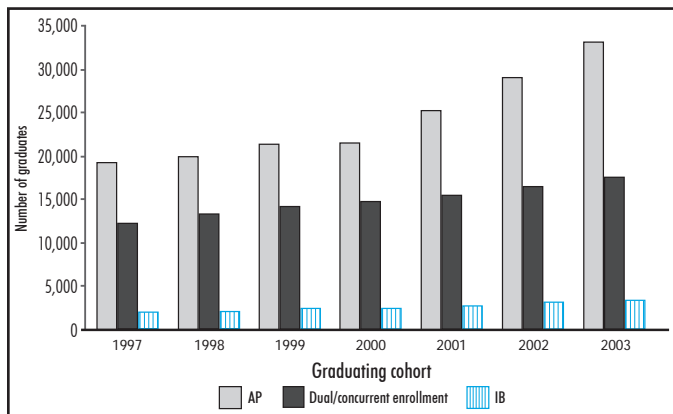
Despite the rapid increase in the popularity of accelerated learning programs, it is apparent that the opportunity to participate in and benefit from them is not evenly distributed throughout the nation or within states. A study by the National Center for Education Statistics shows that high schools in suburban settings were most likely to make such programs available to students while urban and rural schools, where large numbers of underserved populations are concentrated, were less likely to offer accelerated learning options.⁸

The College Board annually provides statistics on how many schools participate in its AP program. It also publicly shares information about the number

of students who take AP exams and what scores they earn, overall and by race/ethnicity. In 2004, 1,366,788 students took 2,336,812 AP exams. Of the total number of test-takers, 4.7 percent were African-American, 13 percent were Asian or Pacific Islander, 13.6 percent were Hispanic, and 61.7 percent were White, non-Hispanic, with other groups and combinations of groups making up the remainder.⁹ By way of comparison, the U.S. Department of Education reported that public school enrollments in Fall 2003 by race/ethnicity were as follows: 58.3% White, 16.1 percent Black, 18.6 percent Hispanic, and 7 percent other.¹⁰

The transcript analysis conducted as part of this project provides much more detail for one state concerning the number and share of students who participated in three accelerated options: AP, dual/concurrent enrollment, and IB. The Florida data show that accelerated options grew in popularity between 1997 and 2003, even as the size of the graduating cohorts increased dramatically and became more diverse. The class of 2003 was almost 31 percent larger than the class of 1997, with 28,398 more members; the number of Hispanics alone grew by over 56 percent. As illustrated in Figure 4.1, between the classes of 1997 and 2003, the number of students graduating with accelerated credit grew by nearly 14,000, a 72 percent increase. Participation in IB and dual/concurrent enrollment also increased substantially relative to 1997 levels.

Figure 4.1. Florida high school graduates who participated in AP, IB, or dual/concurrent enrollment, by year of graduation



Overall, while most Florida high school graduates in this study accumulated no accelerated credit, nearly a quarter earned AP credit and over 14 percent participated in dual/concurrent enrollment, while only 2.5 percent took part in IB (Table 4.1). Many students accumulated accelerated credit through more than one of these three programs, as is evident from the fact that the shares indicated in Table 4.1 together exceed 100 percent.

Table 4.1. Participation in accelerated learning options

	Number	Percent
No accelerated credit	502,336	68.4
AP	170,449	23.2
Dual/concurrent enrollment	104,997	14.3
IB	18,527	2.5

In a report to the governor and state legislature in 2003, the Florida Department of Education provided information about how participation in accelerated learning options was spread throughout the state.¹¹ It found that about 80 percent of dual/concurrent enrollment courses in 2001-02 were taken by students in public high schools. About 35 percent of all students enrolled in dual/concurrent enrollment programs at community colleges that year took the classes in only five of the 28 community colleges. Participation in AP was uneven around the state: 12 of the 67 school districts did not offer any AP courses in 2001-02. Furthermore, although the report did not provide specific examples, some of the remaining 55 school districts offered only one AP course districtwide, which sometimes had only a single student enrolled. Thirty of Florida's school districts offered IB programs, with the number of courses offered varying widely. Not surprisingly, participation in AP and IB was strongest in school districts close to urban areas and to state universities. These results show that the availability of accelerated learning opportunities was not evenly distributed throughout the state.

Accelerated Learning and Postsecondary Access and Success

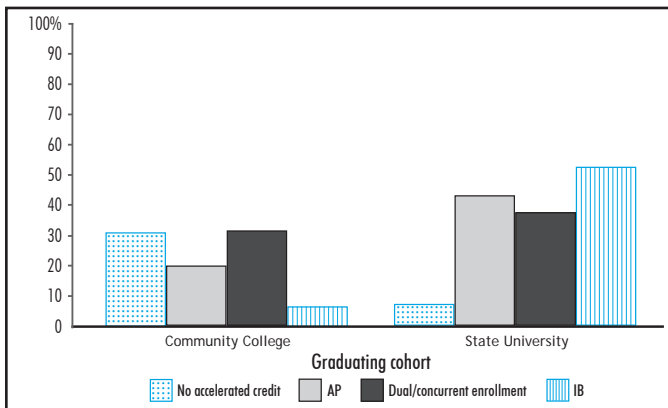
Research has shown that taking a rigorous curriculum in high school improves the chance that a student will enroll in college and complete a postsecondary degree.¹² In keeping with that finding, it is an understandable assumption that students with AP, dual/concurrent enrollment, and IB credit are more likely to continue their education, especially at a four-year institution, as well as to persist, earn a degree, and take less time to finish than students without accelerated credit. Although the analysis of Florida transcripts does not make it possible to draw causal relationships between these programs and postsecondary participation, persistence, degree completion, or time to degree, it does provide useful evidence about the postsecondary experiences, or lack thereof, of students who earned accelerated credit, compared to those who did not.

Postsecondary Enrollment

Overall, the results indicate that students with accelerated credit enrolled in Florida's public four-year

institutions immediately after their graduation from high school at much higher rates than their peers with no accelerated credit. The difference was substantial, as shown in Figure 4.2. Compared to the rate for high school graduates without accelerated credit, students who earned dual/concurrent credit, AP credit, or IB credit were, respectively, about five, six, or seven times more likely to enroll at a campus of the state university system. A different pattern of results was obtained for enrollment in the community colleges, where only students with dual/concurrent credit enrolled at a rate exceeding that of their peers with no accelerated credit. Thus, students with accelerated credit, particularly AP and IB credit, expressed a clear preference for four-year institutions over two-year colleges.

Figure 4.2. Students who were enrolled at Florida postsecondary institutions immediately after graduating from high school

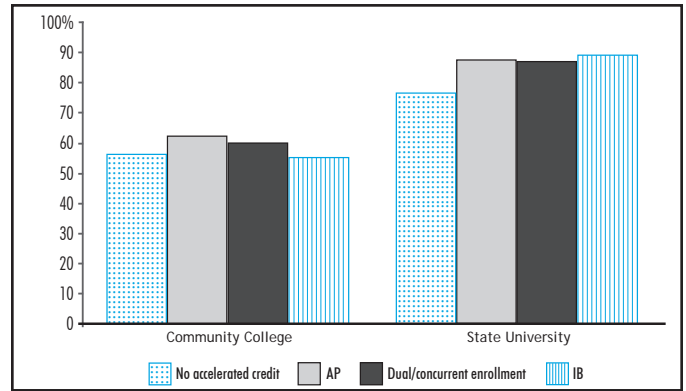


Notes: Students who were enrolled simultaneously in both the community college system and the state university system are counted in both (here and throughout the chapter). Therefore, it is not accurate to add the percentages together to get the rate at which public high school graduates enrolled in public colleges in Florida. The data available for this project did not track students who enrolled in private or out-of-state institutions.

Continuous Enrollment

In addition to looking at college-going rates, the transcript analysis also sought to understand the degree to which students who participated in AP, IB, or dual/concurrent enrollment succeeded in college, as measured by whether they were continuously enrolled for at least two consecutive academic years and whether they earned an associate’s degree or a bachelor’s degree. The evidence shows that among students who went directly from high school to Florida community colleges or state universities, those with accelerated credit were continuously enrolled at slightly higher rates than students without such credit.¹³ It also shows that continuous enrollment rates were higher across the board within the state university system than within the community college system (Figure 4.3). Since community college students are more likely to have inconsistent enrollment patterns, this result is not unexpected.

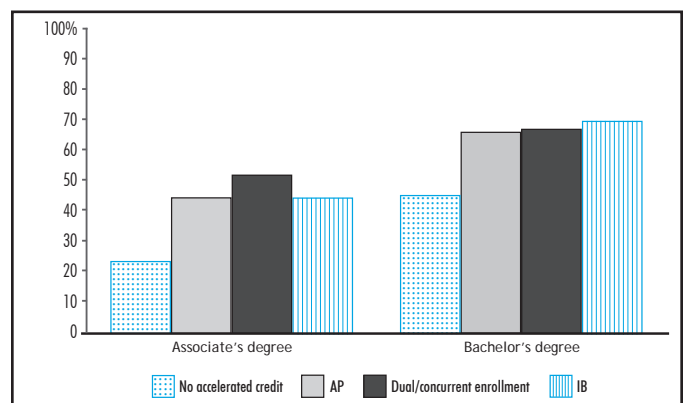
Figure 4.3. Students who were continuously enrolled for two or more consecutive academic years



Completion

Figure 4.4 shows that participation in accelerated learning options was also related to higher completion rates for both associate’s degrees and bachelor’s degrees.¹⁴ Among students who enrolled at community colleges directly after high school, about 44 percent of those with AP or IB credit, compared to less than one-quarter of those without accelerated credit, earned associate’s degrees. Over one-half of students with dual/concurrent credit earned an associate’s degree. Moreover, between 65 and 70 percent of students with accelerated credit earned bachelor’s degrees, while less than half of students without accelerated credit did.

Figure 4.4. Students who completed postsecondary degrees



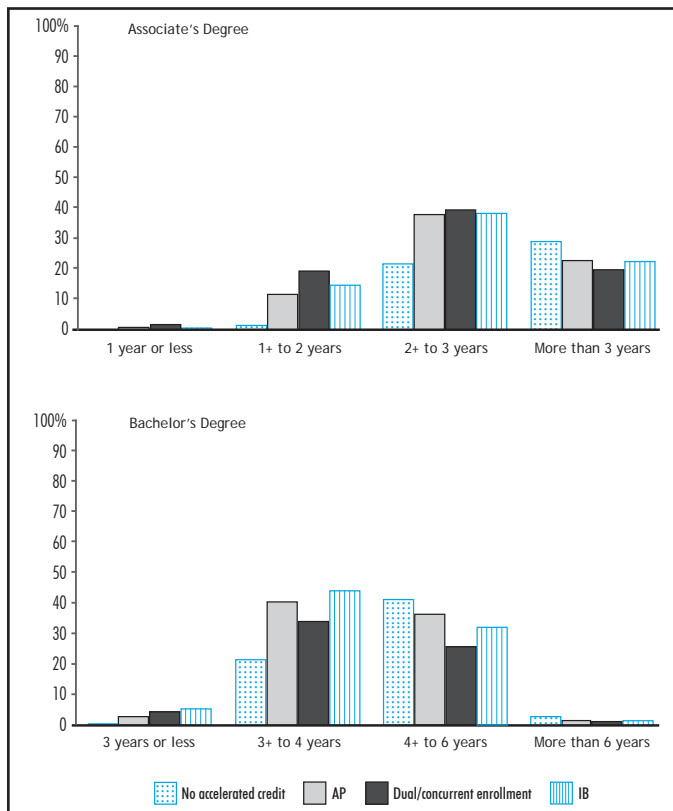
Time to Degree

Finally, the transcript analysis examined whether participation in accelerated learning programs was related to a reduction in time to degree.¹⁵ Figure 4.5 shows how quickly completers finished their degrees, after accounting for students who were enrolled in the last semester for which data were available. Students with accelerated learning credit earned associate’s and bachelor’s degrees in less time following their high school graduation than their peers without accelerated

credit. Yet 74 percent of students with dual/concurrent credit who earned associate's degrees needed more than two years to do so, and the ratios for students with AP and IB credit who took at least that long were higher still.

Time to degree for students pursuing a bachelor's degree was considerably better. Among students who completed a bachelor's degree or were not still making progress toward the degree as indicated by their enrollment in fall 2004, over one-half of those with accelerated credit were able to finish their degrees within four years. About 7 percent of students with both IB and dual/concurrent credit completed their bachelor's degrees within three years of high school graduation. Meanwhile, about two-thirds of students without accelerated credit required more than four years to earn their degrees.

Figure 4.5. Students who completed associate's and bachelor's degrees, by time to degree



Note: Values do not sum to 100; the remainder represents the share who were enrolled in Fall 2004. See Table 7 in Appendix D.

The evidence from the transcript analysis generally supports the assertion that accelerated learning options are associated with higher rates of postsecondary participation and success, though establishing whether participation in an accelerated program is the cause of these positive results would require a more statistically sophisticated analysis. Furthermore, transcripts indicated that students with AP and IB credit preferred

to begin their postsecondary education in the four-year sector rather than in a community college. Almost 38 percent of dual/concurrent enrollment participants also chose to enroll at a four-year campus, while a sizeable proportion (31 percent) of them still enrolled at community colleges. It may be that for many students with dual/concurrent credit, their greater familiarity with community college, acquired through participation in dual/concurrent courses, persuaded them to continue their education there before transferring to a senior institution.

Among students who entered Florida's public postsecondary institutions, those with accelerated credit were also more likely to continue their enrollment and complete an associate's or a bachelor's degree. Finally, students with accelerated credit completed postsecondary degrees within a shorter time frame following high school graduation, on average, than students without such credit. But the proportion of students completing associate's degrees on time (within two years) was small. In addition, though more than half of students with accelerated credit completed bachelor's degrees within four years (and a small fraction finished in three years), a large percentage still needed more than four years.

Patterns of Postsecondary Access and Success by Income and Race/Ethnicity

An important dimension in examining accelerated learning options is the pattern of participation by students from different backgrounds. Do low-income and racial and ethnic minorities take part in accelerated learning programs at rates similar to those of other groups? Moreover, do members of historically underrepresented groups who earn accelerated credit benefit from their participation in such programs at the same rates as others appear to do? The answers to these questions are crucial in understanding whether accelerated learning is an effective tool for enhancing equity.

Participation

Earlier, this chapter provided information about participation levels for all students. Data in Table 4.2 add a dimension by looking at participation by income group and race/ethnicity.¹⁶ Seventy-seven percent of low-income high school graduates earned no accelerated credit during high school through any of the three options examined in the transcript study, compared to 63 percent of their more economically advantaged peers. The proportion of students who did earn credit through any of the three accelerated options was also considerably lower for those from low-income backgrounds.

Table 4.2. Participation in accelerated learning options, by income group

	Total	No accelerated credit		AP		Dual/concurrent enrollment		IB	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
Low-income	268,873	207,085	77.0	45,453	16.9	25,157	9.4	3,732	1.4
Not low-income	465,630	295,251	63.4	124,996	26.8	79,840	17.1	14,795	3.2

Note: The percentages in each row do not sum to 100 because many students accumulated credit via more than one of the accelerated options.

Similar patterns are evident for the breakdown of participation by racial/ethnic group (Table 4.3). Asian or Pacific Islanders and White, non-Hispanics were most likely to complete high school with accelerated credit. More than one-half of the Asian or Pacific Islanders did so. Hispanics graduated with some accelerated credit at a substantially higher rate than Black, non-Hispanic graduates. Hispanics also earned AP credit at a rate comparable to White, non-Hispanic graduates, a pattern that may be unique to Florida due to the composition of its Hispanic population. Finally, the number of students from racial/ethnic groups other than White, non-Hispanics who earned IB credit is low; about six times as many White, non-Hispanics earned IB credit as members of other groups. These data show that Black, non-Hispanics and low-income students earned some form of accelerated credit while in high school at substantially lower rates, and Hispanics at somewhat lower rates, than other groups. To the extent that participation in accelerated learning does help students prepare for and make the transition to college, these gaps are troubling.

Table 4.3. Participation in accelerated learning options, by race/ethnicity

	Total	No accelerated credit		AP		Dual/concurrent enrollment		IB	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
Asian or Pacific Islander	21,866	10,130	46.3	9,824	42.2	4,532	20.7	2,021	9.2
Black, non-Hispanic	146,797	122,303	83.3	17,528	11.9	10,147	6.9	2,270	1.5
Hispanic	120,710	85,134	70.5	31,136	25.8	8,378	6.9	1,898	1.6
White, non-Hispanic	433,523	276,922	63.9	109,216	25.2	80,315	18.5	12,027	2.8

Note: The percentages in each row do not sum to 100 because many students accumulated credit via more than one of the accelerated options.

Postsecondary Enrollment

The transcript data also made it possible to compare the postsecondary experiences of students from different backgrounds with and without accelerated credit. Table 4.4 displays the college-going analysis presented earlier in the chapter, with the data disaggregated by income and race/ethnicity.

Students with accelerated credit from all groups were substantially more likely to enroll at a four-year campus. While about 3 percent of low-income students without accelerated credit went directly to a state university, almost one in four low-income students with AP credit, four in 10 with IB credit, and one in five with dual/concurrent credit did so. Despite these gains, however, middle- and high-income students with accelerated credit still attended a four-year institution at much higher rates. In fact, the evidence indicates that gaps between poor students and their peers in enrollment at four-year institutions was actually wider among those with accelerated credit. Whereas the difference for students without accelerated credit was just over seven percentage points, the gap grew to 23 percentage points for students with AP credit, almost 14 percentage points for students with IB credit, and 20.5 percentage points for students with dual/concurrent enrollment.

Part of the reason for these increased gaps was the greater likelihood that low-income students will continue their education after high school at a community college rather than at a four-year campus. While low-income students with no accelerated credit were less likely to enroll at a community college, relative to their wealthier peers, the opposite was true for low-income students with any type of accelerated credit. Moreover, the rates at which low-income students with AP or dual/concurrent credit enrolled at a community college were higher than those at which they enrolled in the state university system. Thus, the pattern observed in the general population - that students with accelerated credit showed a preference for four-year institutions - did not hold true for economically disadvantaged students, except for those few with IB credit.

For underrepresented minorities, the increases in the participation rates were also dramatic, with Hispanic and Black, non-Hispanic students with IB and dual/concurrent credit enrolling at universities at rates nearly equivalent to that of White, non-Hispanic students. Interestingly, however, Black, non-Hispanics and especially Hispanics with AP credit fell well short of the 46 percent participation rate at four-year institutions for White, non-Hispanics. Instead, as indicated above, a larger share of Hispanics with AP credit elected to begin their postsecondary education at a community college. Also, among those without accelerated credit, Black, non-Hispanic students were substantially less likely to enroll at a community college immediately after finishing high school. Meanwhile, the college-going patterns of students from different racial/ethnic groups with IB and dual/concurrent credit were more consistent. Why students with AP credit from different racial/ethnic backgrounds might behave so differently is puzzling, and no easy

explanation surfaces. But these results underscore the need to pay attention to the ways that culture and background interact with specific types of educational opportunities.

Table 4.4. Students who enrolled immediately following high school graduation, by income group and race/ethnicity

	Community College (%)	State University (%)
Low-income		
No accelerated credit	24.7	2.9
AP	28.3	24.8
Dual/concurrent enrollment	37.3	20.6
IB	13.0	40.5
Not low-income		
No accelerated credit	34.9	10.2
AP	17.8	47.8
Dual/concurrent enrollment	30.6	41.1
IB	5.9	54.2
Asian or Pacific Islander		
No accelerated credit	39.8	12.2
AP	14.6	49.6
Dual/concurrent enrollment	23.4	46.8
IB	4.2	53.1
Black, non-Hispanic		
No accelerated credit	23.8	5.9
AP	18.0	40.8
Dual/concurrent enrollment	27.0	36.4
IB	8.4	51.3
Hispanic		
No accelerated credit	33.0	5.1
AP	26.6	31.4
Dual/concurrent enrollment	31.8	36.1
IB	7.6	49.5
White, non-Hispanic		
No accelerated credit	32.7	8.4
AP	18.6	46.4
Dual/concurrent enrollment	32.6	37.5
IB	6.6	53.1

One obstacle to a student's success in postsecondary education is remedial education. The transcript analysis examined the number of remedial courses students were required to take, and the results are shown in Table 4.5. Members of all groups of students without credit from one of the three types of accelerated learning examined in this study were much more likely than students with accelerated credit to take one remedial course or more. Yet low-income students were also more likely to enroll in remedial courses than were their wealthier peers, regardless of whether the low-income students earned accelerated credit or not. More than four in 10 low-income students with AP credit still took at least one remedial course.

A similar pattern was observed for Hispanic and Black, non-Hispanic students. Since community colleges

have responsibility for providing remedial education in Florida, these results may be one reason why low-income and minority students with accelerated credit were so much more likely to enroll there than at the state universities.

Table 4.5. Students who enrolled in remedial courses, by income group and race/ethnicity

	No courses (%)	1-2 courses (%)	3-5 courses (%)	6 or more courses (%)
Low-income				
No accelerated credit	26.5	28.9	27.6	17.0
AP	59.6	22.7	12.5	5.1
Dual/concurrent enrollment	68.6	19.5	8.9	3.0
IB	77.8	15.4	5.3	1.5
Not low-income				
No accelerated credit	40.5	28.7	21.1	9.7
AP	78.7	14.7	5.2	1.5
Dual/concurrent enrollment	78.7	14.3	5.6	1.4
IB	84.3	11.1	3.5	1.1
Asian or Pacific Islander				
No accelerated credit	34.1	29.5	21.7	14.7
AP	67.4	20.2	9.1	3.3
Dual/concurrent enrollment	67.3	20.9	8.9	3.0
IB	82.8	9.4	6.3	1.6
Black, non-Hispanic				
No accelerated credit	18.1	27.3	31.8	22.8
AP	56.1	25.8	13.0	5.0
Dual/concurrent enrollment	52.4	26.8	14.3	6.5
IB	69.0	23.4	5.7	1.9
Hispanic				
No accelerated credit	28.7	30.5	26.4	14.5
AP	53.5	25.7	14.6	6.2
Dual/concurrent enrollment	67.1	21.6	8.5	2.8
IB	66.4	20.9	10.0	2.7
White, non-Hispanic				
No accelerated credit	44.0	28.7	19.6	7.8
AP	83.0	12.4	3.8	0.9
Dual/concurrent enrollment	79.9	13.6	5.2	1.2
IB	88.9	8.1	2.2	0.8

Continuous Enrollment

The results of the examination of continuous enrollment at state universities revealed no large differences between groups with different background characteristics. Students with accelerated credit were somewhat more likely to be continuously enrolled for at least two consecutive years at a four-year campus than students with no accelerated credit, regardless of income level or race/ethnicity (Table 4.6). The rates at which students were continuously enrolled at community colleges were substantially lower across the board. Moreover, some groups of students with accelerated credit, especially IB credit, had lower rates of continuous enrollment than their peers without accelerated credit. This counterintuitive

finding may be related to a number of factors: students with accelerated credit may complete an associate’s degrees in less than two academic years, may have higher rates of transfer to senior institutions before completing an associate’s degree, or may have higher rates of simultaneous enrollment at both a community college and a state university. But given that two years is the typical length of a program of study leading to an associate’s degree for students enrolled full time, it is especially difficult to interpret the findings of this particular analysis.

Table 4.6. Students who were continuously enrolled for two or more consecutive academic years, by income group and race/ethnicity

	Community College (%)	State University (%)
Low-income		
No accelerated credit	53.0	77.6
AP	60.1	86.9
Dual/concurrent enrollment	54.3	85.8
IB	48.5	87.7
Not low-income		
No accelerated credit	57.7	76.0
AP	63.1	88.0
Dual/concurrent enrollment	60.5	87.2
IB	57.1	89.6
Asian or Pacific Islander		
No accelerated credit	65.6	79.7
AP	60.5	91.8
Dual/concurrent enrollment	61.7	90.7
IB	60.9	90.6
Black, non-Hispanic		
No accelerated credit	49.7	79.2
AP	49.2	87.5
Dual/concurrent enrollment	51.2	87.5
IB	39.2	87.3
Hispanic		
No accelerated credit	60.5	75.2
AP	66.5	85.7
Dual/concurrent enrollment	57.7	84.2
IB	56.4	90.5
White, non-Hispanic		
No accelerated credit	56.3	75.8
AP	62.3	87.8
Dual/concurrent enrollment	59.7	86.8
IB	57.8	89.1

Completion

Degree completion is an important indicator of postsecondary success, and the results of the transcript analysis show that students with accelerated credit were more likely to complete degrees than those without, regardless of income level or race/ethnicity (Table 4.7). Among students who went from high school directly to community colleges, low-income students

with some accelerated credit were more than twice as likely to earn an associate’s degree as their peers without such credit, and there was a difference of at least 20 percentage points for bachelor’s degree completion rates. Underrepresented minorities with accelerated credit also were substantially more likely to complete postsecondary degrees than their peers without such credit. Again, however, the results show a gap between the completion rates of underserved students and more advantaged students. Middle- and high-income students and White, non-Hispanic students earned degrees at much higher rates than did low-income and Black, non-Hispanic and Hispanic students with the same type of accelerated credit. In addition, students with dual/concurrent credit were consistently more likely to complete associate’s degrees than students with AP or IB credit, and students with IB credit were most likely to complete bachelor’s degrees.

Table 4.7. Students who completed postsecondary degrees, by income group and race/ethnicity

	Associate’s degrees (%)	Bachelor’s degrees (%)
Low-income		
No accelerated credit	18.5	40.7
AP	37.4	60.4
Dual/concurrent enrollment	44.8	61.3
IB	40.6	65.1
Not low-income		
No accelerated credit	25.7	47.5
AP	47.3	68.4
Dual/concurrent enrollment	54.1	69.1
IB	45.5	71.2
Asian or Pacific Islander		
No accelerated credit	31.0	46.2
AP	47.7	67.1
Dual/concurrent enrollment	54.1	67.9
IB	51.6	72.3
Black, non-Hispanic		
No accelerated credit	13.9	37.6
AP	28.5	57.2
Dual/concurrent enrollment	34.0	57.1
IB	33.5	61.7
Hispanic		
No accelerated credit	21.3	39.0
AP	37.0	57.7
Dual/concurrent enrollment	46.2	58.9
IB	30.0	66.0
White, non-Hispanic		
No accelerated credit	26.5	49.3
AP	48.9	69.0
Dual/concurrent enrollment	53.9	69.1
IB	49.0	71.6

Findings from Other Research

The educational research community has paid modest attention to accelerated learning programs and their effects on postsecondary access and success, but the knowledge base is likely to grow along with the popularity of such programs. Much of the momentum behind the expansion of accelerated learning is rooted in the promises many see in it for closing educational attainment gaps that are based on income inequality and race/ethnicity. Underrepresented students who participate in accelerated learning programs may become more likely to view college as a realistic option due to their exposure to college-level curriculum, receipt of targeted college recruitment materials, and interaction with peers who share the same or similar academic goals.¹⁷ However, accelerated learning programs are not evenly available to all students; instead, underrepresented students are concentrated in the school districts least likely to offer accelerated learning programs.¹⁸

With the increasing popularity of accelerated programs, academic researchers are taking greater interest in examining them, and their efforts are helping to provide a deeper understanding of the effects of these programs. However, the research that currently exists does not consistently indicate that such programs contribute to collegiate success. One study often cited by proponents of accelerated learning programs, and which was recently repeated, indicates that a rigorous curriculum is the strongest predictor of success in college, especially for minority students.¹⁹ A study of the outcomes related to accelerated learning in Florida found that students with accelerated credit performed at least as well as or better than students without accelerated credit in subsequent courses in terms of grade point average and retention but indicated that at least part of the difference was related to previous academic performance and SAT scores. The report also documented instances in which students in Florida's state universities repeated courses for which they had already earned accelerated credit.²⁰

Studies that examine specific accelerated programs have not established linkages between postsecondary success and participation in the programs after accounting for other important contributors to academic success. One study found that while scores on AP tests are strongly related to performance in college, simply taking AP or honors-level courses seems not to be a valid indicator of future success.²¹ After taking into consideration other factors like family and school characteristics, another research team found no differences in persistence and performance in college between students who took AP and those who did not.²² Finally, using case studies, a third study found that minority students faced obstacles to participating in accelerated learning programs even when schools

expanded access to them with the specific intent of reaching those students.²³

Conclusions and Further Research

Answers to the question posed at the outset of this chapter are complicated and, as descriptive research, the transcript analysis does not allow for any definitive conclusions about whether accelerated learning helps motivate students to enroll in college or succeed once there. Additional research is needed that seeks to capitalize on detailed data in a way that can distinguish the effects of participation in accelerated learning options from the likelihood that students who take part in accelerated options are more academically motivated, have more aptitude, or enjoy more parental and community support. Some researchers are already heading down these avenues, but more can be done.²⁴

But this transcript analysis does offer useful insights into the ways accelerated learning options are associated with postsecondary access and success. First, it shows positive but inconsistent results across the public sector in Florida in terms of college-going rates. For all three types of accelerated learning, a larger share of students went directly from high school to one of Florida's public universities than enrolled at the community colleges, and only students with dual/concurrent credit enrolled at a community college at a higher rate than students without any of the three types of accelerated credit. This evidence indicates that students with accelerated credit preferred to enroll at four-year institutions, although it was noticeably less obvious among students with dual/concurrent credit and slightly more apparent among students with IB credit. Among students who enrolled in either sector, those with accelerated credit tended to be continuously enrolled and complete a degree at higher rates than those without accelerated credit. Fewer years tended to elapse between high school graduation and postsecondary degree completion for students with accelerated credit as well. But only a small percentage of students with accelerated credit completed degrees in less than four years. Finally, participation in AP was the most widely available accelerated option; however, it was generally the case that the rates at which students with AP credit accessed and succeeded in postsecondary education were below those for students with IB and dual/concurrent enrollment credit.

These general patterns, however, conceal important differences based on students' backgrounds. Between 1997 and 2003, Florida students from historically underrepresented populations experienced substantial gains in terms of their postsecondary experiences associated with whether they had earned accelerated credit in high school or not. But whereas White,

non-Hispanic students and middle- and high-income students with accelerated credit tended to enroll more often at campuses within the state university system, minority students and low-income students were much more likely to continue their education at community colleges. In fact, the improvement in enrollment rates at the universities among low-income students with accelerated credit was less than that of their wealthier peers, and the gap was wider among those with accelerated credit than among those with no such credit. This may be cause for concern for policymakers dedicated to ensuring equality of access to public four-year institutions, especially for students who elect to take a more rigorous curriculum in high school.

Among those who went directly to college, historically underserved students with accelerated credit were more likely to be continuously enrolled and complete postsecondary degrees than their peers without such credit. Furthermore, students with accelerated credit were consistently less likely to enroll in remedial courses. Yet low-income and minority students were substantially more likely to take remedial courses than others with such credit. Additionally, low-income students and minority students were less likely to complete postsecondary degrees than wealthier students and White, non-Hispanic students.

It is promising that students who earned accelerated credit while in high school were able to enter college and complete degrees at higher rates than their peers without such credit. The transcript analysis indicates that students who earn accelerated credit are better positioned for success in their pursuit of a college education. But it remains unclear why the benefits of accelerated learning are not as widespread among underrepresented groups who take part in such programs. Further research should examine this in greater depth, and given the inconsistent results among different students from racial/ethnic groups who earned AP credit, such research might focus on how different groups perceive and make use of specific accelerated learning options. Ultimately, accelerated learning options were uniformly associated with improved access to and success in college, particularly at four-year institutions.

Endnotes

- ¹ Clifford Adelman, *The Toolbox Revisited: Paths to Degree Completion from High School through College* (Washington, D.C.: U.S. Department of Education, 2006).
- ² "College-Bound Black Students Are Slowly Advancing in Advanced Placement Tests," *The Journal of Blacks in Higher Education* 19 (Spring 1996), 6-9.
- ³ Hilary Pennington, "Accelerated Advancement in School and Work," *Brookings Papers on Education Policy: 2003* (Washington, D.C.: Brookings Institution Press), 339-363.
- ⁴ Carol P. Dougan, "The Pitfalls of College Courses for High-School Students," *The Chronicle of Higher Education* (October 28, 2005); Starita Smith, "Utah Questions Dual Enrollment," *Community College Week* (August 23, 1999); Leo Reisberg, "Some Professors Question Programs That Allow High-School Students to Earn College Credits," *The Chronicle of Higher Education* (June 26, 1998).
- ⁵ National Center for Public Policy and Higher Education, *Measuring Up 2004*, accessed on 12/1/05 from <<http://measuringup.highereducation.org/default.cfm>>.
- ⁶ National Commission on Accountability in Higher Education, *Accountability for Better Results: A National Imperative for Higher Education* (Denver: State Higher Education Executive Officers, March 2005); *An Action Agenda for Improving America's High Schools* (Washington, D.C.: Achieve, Inc., and National Governors Association, 2005); Andrea Venezia, Patrick M. Callan, Joni E. Finney, Michael W. Kirst, and Michael D. Usdan, *The Governance Divide: A Report on a Four-State Study on Improving College Readiness and Success* (San Jose, CA: The National Center for Public Policy and Higher Education, 2005).
- ⁷ Data on participation in Tech-Prep was not sufficiently complete to permit an analysis.
- ⁸ Tiffany Waits, Carl J. Setzer, and Laurie Lewis, *Dual Credit and Exam-Based Courses in U.S. Public High Schools: 2002-03* (Washington, D.C.: National Center for Education Statistics, April 2005); Brian Kleiner and Laurie Lewis, *Dual Enrollment of High School Students at Postsecondary Institutions: 2002-03* (Washington, D.C.: National Center for Education Statistics, 2005).
- ⁹ The College Board, "AP Summary Reports: 2004," accessed 10/25/04 from <http://www.collegeboard.com/student/testing/ap/exgrd_sum/2004.html>.
- ¹⁰ National Center for Education Statistics, U.S. Department of Education, "Table 4-1. Percentage Distribution of Public School Students Enrolled in Kindergarten through 12th Grade, by Race/Ethnicity: Fall 1972-2003," *The Condition of Education* (Washington, D.C.: U.S. Government Printing Office, 2005), 111.
- ¹¹ Florida Board of Education and Florida Department of Education, "Study on Accelerated Mechanisms in Florida" (December 2003), accessed 1/19/06 from <http://www.firn.edu/doe/postsecondary/pdf/acc_accelerationstudy_1203.pdf>, 9-16.

¹² Adelman, *The Toolbox Revisited*.

¹³ In this chapter, all results concerning continuous enrollment, degree completion, and time to degree are based on students who enrolled in the associated sector immediately after high school graduation. For example, the associate's degree completion rates are given for those students who earned an associate's degree among all students who went directly to a community college after finishing high school.

¹⁴ These results do not account for students who delayed their enrollment, nor do they limit students to a uniform time frame by which to complete their degrees (all students had until the 2004-05 to finish postsecondary degrees, regardless of their high school graduation date).

¹⁵ The time-to-degree data are simply the number of years between high school graduation and postsecondary degree completion rather than a measure of how many years a student was enrolled in postsecondary education.

¹⁶ Low-income students were those who participated in the free or reduced-price lunch program or who received a Pell Grant. Details are in the appendix.

¹⁷ Nancy Hoffman, "College Credit in High School: Increasing College Attainment Rates for Underrepresented Students," *Change* (July/August 2003), 43-48; Michael Kirst and Kathy Bracco, "Bridging the Great Divide: How the K-12 and Postsecondary Split Hurts Students, and What Can Be Done About It," in *From High School to College*, eds. Michael Kirst and Andrea Venezia, (San Francisco, CA: Jossey-Bass, 2004).

¹⁸ Waits et al., *Dual Credit*.

¹⁹ Adelman, *The Toolbox Revisited*, and Clifford Adelman, *Answers in the Toolbox: Academic Intensity, Attendance Patterns, and Bachelor's Degree Attainment*, (Washington, D.C.: U.S. Department of Education, 1999).

²⁰ Florida Board of Education, "Study on Accelerated Mechanisms."

²¹ Saul Geiser and Veronica Santelices, "The Role of Advanced Placement and Honors Courses in College Admissions" (Berkeley, CA: Center for Studies in Higher Education, 2004), accessed on 10/13/05 from <<http://repositories.cdlib.org/cshe/CSHE-4-04>>.

²² Kristin Klopfenstein and M. Kathleen Thomas, "The Link between Advanced Placement Experience and College Success" (Dallas, TX: Texas Schools Project, 2005), accessed on 10/13/05 from <<http://www.utdallas.edu/research/tsp/pdfpapers/newpaper1b.pdf>>.

²³ Susan Yonezawa, Amy Stuart Wells, and Irene Serna, "Choosing Tracks: 'Freedom of Choice' in Detracking Schools," *American Educational Research Journal* 39, no. 1 (2002), 37-67.

²⁴ Kristin Klopfenstein, "Advanced Placement: Do Minorities Have Equal Opportunity?," *Economics of Education Review* 23, no. 2 (2004), 115-131.

Chapter 5

The View from Inside: Students Discuss Accelerated Learning

John Immerwahr and Steve Farkas

As the other chapters in this volume show, there is a great deal of interest in accelerated learning as a possible solution to some of the issues facing higher education in the 21st century. The evidence seems to suggest that high school students who pursue accelerated learning options (such as Advanced Placement (AP), International Baccalaureate (IB), dual/concurrent enrollment, and Tech-Prep) are more likely to pursue postsecondary education, perform better in college once they get there, and obtain their degree more quickly.¹ All this suggests that greater emphasis on accelerated learning may be a win-win approach; it appears to benefit society by producing better educated students at a lower cost, and it may save time and money for students and their families. Some observers believe that accelerated learning is an appropriate strategy for improving the educational attainment of currently underserved populations.

Like many promising strategies, however, an increased reliance on accelerated learning cannot be implemented by experts and policymakers alone. This strategy relies for its success on the active participation of the public: parents, teachers, and, most significantly, high school students themselves. In fact, students hold veto power over any efforts to increase the use of accelerated learning. All of this makes it important to understand what young people think about accelerated learning.

To explore this question, project staff worked with two researchers to conduct a small-scale focus group study in Colorado (see Appendix E for a full discussion of the methodology). In total, the focus group facilitators spoke to 62 high school and college students, including some students who were participating in accelerated learning, some who were eligible for accelerated learning but chose not to participate, and others who did not participate or know of the programs. The high school students ranged from freshmen through seniors, and the college students were freshmen and sophomores. The majority of the high school students were Hispanic or African American and eligible for free or reduced-price lunch, and about half of the college students were eligible for Pell grants. Some students were enrolled in a high school that offered a number of AP classes; others were in a high school that offered dual enrollment classes.

Although this report focuses on four types of accelerated learning options, due to the nature of

the schools and postsecondary institutions involved, the focus groups mainly concentrated on AP and dual/concurrent enrollment; only a few of the students mentioned IB. To gain an institutional perspective, the researchers also interviewed several high school guidance counselors and AP teachers.

This research shares the usual advantages and disadvantages of focus group research. On the one hand, focus groups allow for an in-depth, qualitative exploration of the dynamics underlying the public's attitudes toward complex issues. The strength of focus groups is that researchers can talk with real people face to face, as in this study, getting a feel for their values, concerns, and priorities. A well-executed focus group can uncover dormant issues that have not been part of the public debate, thus creating an opportunity for organizations to exercise leadership in bringing such issues to light. Focus group findings, however, are not the result of random sample surveys, and they cannot be generalized to the population as a whole.

The conversations centered on four main questions:

1. What sources of information do students have about accelerated learning?
2. What are some of the things that make accelerated learning attractive to students?
3. What are some of the obstacles that prevent students from pursuing accelerated learning?
4. What do the students perceive as the comparative strengths and weaknesses of different modes of accelerated learning (specifically, AP and dual enrollment)?

Information Sources about Accelerated Learning

Ambitious Dreams, Fuzzy Plans

One of the AP teachers described the current educational system in this way:

The kids come in with super-high ideals, which I know they probably won't get. That is probably a fault of the schools. The elementary schools teach them: "Rah, rah, rah, you can be anything you want, you can be a doctor, a lawyer, or whatever you want."

But the downfall is that they don't show them what they have to do to obtain those goals.

The interviews with students, especially those who had declined to take accelerated learning options, were consistent with that view. Nearly all of these students said that they wanted to go to college at some point (a few were thinking of going into the military first). But often their plans were rather vague, ill informed, and unrealistic. Although they talked about college, they did not seem well informed about the mechanics of making an application or a decision. As one high school student who had not taken any AP classes said:

I want to go to college and start my own band and also study art and medicine. I haven't looked into any schools. I'll go to school for art. I have never taken any art classes here at the school.

Inadequate Sources of Information

It is, of course, not surprising or necessarily problematic that high school students have high ambitions and little sense of realism. But the remarks from these students are symptomatic of a more disturbing factor: many of them do not have other sources of information that might help them take the steps necessary to translate their dreams into realities. Just like students from more affluent districts, these students learn a great deal from their parents, relatives, and friends. The difference is that in many cases these students are in the first generation to pursue higher education, and some are or will be the first person in their family to graduate from high school. Many of these students come from families who have no first-hand experience with preparation for college or with the details of various accelerated learning programs.

Without clear guidance from the adults in their lives, the students also rely heavily on what they learn from the media or from popular culture. Many of the young women wanted to go into the fashion industry, and the single most common career choice overall was criminal investigation (possibly a result of the popularity of TV shows such as *Law and Order* or *CSI*). There were many variations on the following comment by a high school student:

I want to go to college and get a degree in criminal investigation. I don't know how I picked it. I like everything that has to do with crime. Nothing here at the high school really deals with that.

When the focus group moderator asked the students how important they thought a college education was for success in life, many drew on what they had

learned from the media. Several students mentioned the fact that the richest man in the world is Bill Gates, a college dropout, and they also referred to the success of highly publicized sports figures or entertainers. One young man, a high school student, explained it this way:

Someone told me, you go to high school and college, they teach you how to work for someone else. But you can make more money if you work for yourself. Do like Bill Gates did: drop out of college and start your own business. Look at the actors and singers, they don't have college degrees.

High School Guidance Counselors

What about the influence of high school guidance counselors? Those counselors who were interviewed for the project spoke positively about accelerated learning. They enthusiastically described their success in finding students who could do accelerated work and in giving the students and their parents the appropriate information. As one counselor said:

We also look at how they are doing, and if we think a student ought to be able to handle AP, we encourage them and tell them why they ought to be taking it. So, for example, we say, "What are you doing after high school? Maybe you are going to college." Then we explain how this can help them in getting admitted, and we tell them, "You will be more competitive for scholarships, and you will be better prepared for college."

A few of the students also mentioned how important and influential their counselors had been. One college student who had done AP work in high school put it this way:

My guidance counselor was great. When I was doing AP classes in senior year, she made sure I got the right ones and helped me fill out my college applications.

The more common theme from our discussions, however, was that the counselors are overworked and inaccessible. Students said that their counselors had hundreds of students to deal with. Although each counselor might have successfully interacted with some students, many others got little or no positive information from them. Over and over again, stories emerged from students about meetings with counselors that were brief and perfunctory. Said one high school student:

It bothered me that my counselor didn't tell me about college courses until I asked him. And it was the same way my freshman year. I

started doubling up on classes, two math and two science classes. He didn't tell me about that; my mom suggested it. He was nice, he wasn't mean or a bad counselor, but he had a lot of stuff going on.

A college student commented:

There were so many kids, and my counselor seemed overloaded. It was a problem even to get in to see her. I never expected her to say something helpful, like about what AP classes would do for my transcript.

Several students described a situation where a counselor had suggested an AP course but in a rather half-hearted way. It seemed that if the student did not show immediate interest, the counselor sometimes backed off, rather than following up with a parent or a student at a later point. A number of comments resembled this one, from a high school student:

My counselor talked to me about AP classes, but I was like: "No, I'm good, I don't need them." My counselor said, "When you are ready, let me know."

An even more troubling theme surfaced from a surprising number of the students. These students felt that the guidance counselors in their school sometimes discouraged students - especially minority students - from taking accelerated learning courses, even though those students might have been able to do the work. An African-American college student said:

One of the counselors at one of my schools, I was asking her about testing out of classes and taking more advanced classes. She was really discouraging. I remember her saying, "Oh, honey, you won't want to do that, those classes are really hard."

A high school student, also African-American, told this story:

I have a friend who was going to take a college class; it wasn't AP but a college professor was coming down to teach it. I know she could have done the work, but the counselor recommended her not to take the class, but to take a back-up class. My friend thought about it and said, "I might not pass it," so she didn't take it.

A white high school student told of this experience:

In my experience at high school, the counselors were trying to prevent some black kids from taking AP courses, saying, "you probably won't do well there." They didn't try to block them, but they said, "You want to take an AP class? You shouldn't, I wouldn't recommend it."

Some of the AP teachers interviewed made similar remarks. They also felt that at least some of the counselors were steering students away from accelerated learning and cautioning students to avoid challenges. Here are comments from two of them:

Counselors? Sometimes I think we are not speaking the same language. They aren't pushing the AP curriculum because they think the kids can't do it. They say, "You don't want a hard course." There is something in the atmosphere of the community that runs away from challenges. When it comes to getting kids into the AP classes, there is a dysfunction.

In the AP courses, we have done an end-run around the counselors because we haven't found them to be very effective, especially for students with higher academic demands. They don't understand the importance of academic rigor, and they have an underlying belief that the students can't achieve at the levels [that] are expected. I have heard discouraging comments from counselors: "This is going to be a really hard class, you shouldn't be in there." I find that students rise to the occasion. Students show up in class who you wouldn't expect to be there, but sometimes they surprise you. We underestimate the ability of students.

The Influence of a Single Person

The focus groups also revealed many success stories of students who had been brought into accelerated learning and done well. These individual victories were often the result of the attention of a single person who reached out to a student. Sometimes it was a teacher who took extra interest in a student; at other times it was someone outside of the official channels of information or another student. Here are two success stories, related by college students:

I am the first person in my family to go to college. My parents didn't go to high school. My parents had nothing to do with my doing AP classes. My U.S. history teacher said, "There is no reason why you shouldn't take AP history. You are good at it and you enjoy it." So I signed up for it, and I did great.

My coach talked to me about those classes and how those courses would transfer to college. I took AP literature and Spanish. On Spanish, I did pretty well, and it actually transferred. As far as the other students, they weren't really aware of college, especially the minorities. She organized the whole team to let our friends

know you should go to college, or at least community college.

And another story, from an AP teacher:

I convinced one kid to be in my AP class. When he finally came, he brought his buddy. They are both basketball players. His friend is a talented writer. I don't know what his grade point is, he is absent a bit, but he is very bright and is a good writer.

The Attraction of Accelerated Learning

When experts and leaders talk about accelerated learning, they often stress the importance of students acquiring college credits while in high school as a way of gaining a college degree more quickly. While some students mentioned these factors (discussed in detail below), they typically focused on the more immediate benefits of college classes in terms of the quality of the experience.

The Logical Next Step

For at least some of the students interviewed, accelerated learning was really the next step of a process that had begun years earlier. They had been tracked into advanced courses from middle school, so in high school it was natural for them to opt for accelerated learning courses. As one college student described the process:

I had taken honors physics as a junior, so AP physics was the next step. I had to have four years of science.

More Challenging (and Less Boring) Classes

Many students complained that their high school classes were boring, often repeating things they had already learned. For these students, accelerated learning classes offered something new, different, and much more exciting and challenging. The emphasis was not on the credits but on the opportunity to escape from the tedium of a regular high school class. A college student remarked:

It was less about the college part and more that I was just bored in the other classes. I knew what they were teaching, I read fast and I pick up things fast. So being in an AP class was challenging and I could keep pace with what we were doing. There was a reason for me to be going to class.

A high school student said:

They asked me this year if I wanted to be in an AP class, and I wanted to because it would

challenge me more. Usually the regular classes are so boring that I would finish my work and have nothing to do. It is challenging, and it is a step ahead of everyone else. The other classes are boring and are reiterating what they told you in the past. AP classes challenge you more and make the school exciting.

Better Teachers

For many students in accelerated learning, the high quality of the teachers was a major factor. The accelerated learning teachers were perceived as more experienced and knowledgeable, and their approach was a change from that typically taken by high school teachers. The students also liked the fact that the accelerated learning classes were smaller, so that the teachers were able to give more individual attention. A college student noted:

I liked the teachers who taught the AP classes more than the regular class teachers. Most of the teachers who taught the regular classes were young and didn't know what they were doing. They were either really strict or else they couldn't control the class. The AP teachers were more experienced. In the science class, we were really doing experiments, not just dumb worksheets. It wasn't bad to get the college credits, but that wasn't my main reason for taking the classes.

Two high school students in dual enrollment classes put it this way:

The high school teachers [as opposed to the college professors who teach the dual enrollment classes] are more strict, or more stressed out. They have 300 or maybe 250 students every day. You have to go slower with some, faster with others. But at the college level, everyone is more at the same level.

The professors come from the campus downtown right here. They are very interested in it, they love what they do. They bring their "I want to be here" attitude to the class, and it makes everyone want to participate. Overall, the attitude is, "This is a college class." The teachers are more loose, they crack jokes and laugh, it is more fun.

Fewer Behavioral Issues with Other Students

Another reason why students liked the accelerated classes is that their fellow students are interested in the material and want to be in the classes. One student described the difference between her high school, where many of the students were in dual enrollment classes, and the regular high school:

The kids who come here want to be here. Kids in the regular high school just go to go; they don't plan to go to college. At most other schools, they have more problems than we have.

Another high school student stressed the behavioral issues in non-AP classes.

When you are not in an AP class, there will be 30 students in the class. Some will stand up and be wild.

Pride and Camaraderie

Students also spoke of their accelerated learning classes with a great deal of enthusiasm, despite (or even because of) the heavier workload. The students in accelerated classes often felt a great deal of pride and shared a sense of community with their classmates. The experience of taking a more challenging class together had helped them to get to know each other better. Two high school students commented:

It seems like the students who are in the advanced classes stick together and have a bond. The others run wild and don't really care. They are focused on things other than school, and they are trying to figure out where they should be. Here, we are pretty much set.

From day one you are like a small family. You don't have a problem calling someone and saying, "I don't understand question four, can you explain that to me?"

Many students were proud of the fact that they were doing college-level work in high school. This was especially true for students whose families had not gone to college. One high school student said:

My parents are excited for me because I will be the first person to graduate from high school... in the U.S. My mom went to college in Mexico. Before that, on my dad's side, they didn't have the opportunity to go to college. They are proud of me, and my family in California is truly excited that I will be the first one to graduate.

This will sound dorky, but it is academically satisfying. It is cool, when you see your family and you say, "I am taking college classes." It feels satisfying, it makes you feel smarter, and it gives you confidence to do things.

Easing the Transition to College

College students said their accelerated learning classes had helped prepare them for their college classes. Some students even said that their college classes were

easier than their AP classes. The accelerated learning classes sharpened their skills, taught them time-management skills and self-discipline, and gave them a feel for what a college course would be like.

In my English class in AP, my writing really improved. I learned to be concise and to the point. The biology class helped me in my study skills because it was almost self-paced. It made you learn how to teach the material to yourself.

It was helpful, to see what college is like. When you walk into the class, you can feel the difference. In high school they babysit you a lot. Here, it is on you, this is what you are going to do, and you can do it or you don't. AP is in the middle: it is more flexible but it is not the same as being on campus.

College Credits and Faster Graduation Are Less Important

As mentioned above, the high school students who were interviewed focused much more on the immediate benefits of accelerated learning than they did on the long-term impact of saving money or graduating sooner.

Very few of the AP students spontaneously mentioned college credit as a reason for taking AP classes, and even when it was mentioned, several were not sure that they would be graduating earlier. Others stressed that they wanted to stay in college for four years.

College students who had taken AP most typically talked about the educational advantages:

For me anyway, the learning continues to be more valuable. I wasn't even thinking about the financial aspects, such as finishing college earlier, paying less for college, or not spending \$300 on books. The financial aspect isn't a reason, and I don't think it should be the primary reason. That should only be a part of it. The more undefinable reasons should be the bigger reasons.

I want to go to college for four years and have the college experience and not leave early. I could leave early, but I wouldn't want to.

A different picture emerged from the students attending the school where dual enrollment is part of most students' curriculum. Most expected to graduate from high school with an associate's degree. The promise of a degree made them much more conscious of the fact that what they were doing now might have an impact on their future, either as far as how much they paid for college or how long it took them to complete it.

What's your Major?

Rather than speaking of completing college in less time, what seemed more interesting to the students is the idea that they could get basic courses out of the way and move more quickly to their major. For many students, the idea of a college "major" has great significance. They often speak as though the choice of a major is the beginning of adult life. College students seem to agree: in interviews done for other projects, they reported that the question they are always often by adults is "What is your major?" with the understanding that the choice of major is also thought to be the choice of lifetime career.

Several students felt that taking accelerated classes would allow them to skip the preliminaries and go directly to their major. One high school student said:

When I heard about this program where I could take college courses, I jumped at it. I want to get a jumpstart on my career. When I do enter a four-year university, I'll enter as a college sophomore, and I'll have my requirements out of the way and I can jump right on my major.

I came from a school that was in complete contrast to what some of the others here are describing. I wasn't ever bored, the basic classes were challenging as well as the AP classes. I took it mainly so I could get some of the basics out of the way, so I could get into my major.

The Influence of Parents

As with virtually every aspect of schooling, parents play an important behind-the-scenes role in encouraging students to take accelerated learning classes and supporting them once they are in those classes. One teacher said, "I call home and say the homework isn't there" and then it comes in.

Raising the Level of Expectations Schoolwide

The interviews primarily focused on the benefits of accelerated learning for the students themselves. But there was also a clear sense from many of the conversations that accelerated programs benefited schools as well by setting an example of excellence and pushing up the standards. As one of the AP teachers said:

The existence of the AP program in the school raises expectations generally. Kids acknowledge it. I worked in curriculum development, and we wanted to use AP as a way to [improve] the curriculum. My theory is that when we teach, we teach to the top. You are aiming for excellence.

There were many accounts of students who were not initially in elite classes but who were spotted by a teacher or a counselor and directed to an accelerated learning program. Others were recruited by fellow students or an older sibling. Some of these students dropped out, but others flourished in the more challenging environment. Once a student did well in an accelerated learning class, he or she was sometimes swept up into that subculture and enrolled in other accelerated learning classes.

Obstacles to Participation

A number of high school students interviewed had not taken accelerated classes. Some were eligible for accelerated learning but chose not to participate. The focus group moderator also spoke to other students, now in college, for whom it had never been an option.

Fear of a Heavy Work Load and Low Grades

It is not hard to see why some students resist taking accelerated learning classes, especially AP classes. The argument for taking accelerated classes is that they are more challenging. But the fear of low grades and a lot of work scares off some students. One high school student explained that he was afraid AP classes would make him ineligible for his extracurricular activities:

I wasn't curious about taking those classes because I have too much to do. I have drumline and track, and I need to stay eligible. I would take all of them, if there wasn't a risk, because they will help you with college. If I wasn't in track or drum, I'd be in all of them.

The concern about grades is so strong that some students saw taking an AP class as a *disadvantage* when it comes to preparing for college. One high school student said:

I don't want to get into an AP class and mess up. I had good grades in the other classes, but I struggled just a little bit. I didn't want to get in there and struggle completely.

Two other students, speaking from the vantage point of college, remarked:

Why not take the classes you are in, and get an A in those classes? I don't think taking AP classes makes your application look better. You would be barely getting by in those classes.

I wouldn't push anyone to take AP classes. I think high school students have enough they are trying to do already. They are too overloaded. I think that is why some kids don't go to college, or don't do well - they are

too overwhelmed. My advice: do well in the regular classes that you are already in rather than trying to take an AP class.

Several of the students said that they just did not want to work that hard or that they wanted to take a break from work during their senior year. In fact, both the accelerated and the non-accelerated learning students suggested that effort, not talent, was the defining difference between those who pursued accelerated learning and those who did not. Although students who did not take accelerated learning sometimes described themselves as lazy, one wonders whether some of that was really a lack of confidence. Looking back on her high school experience, one college student spoke explicitly about her fears of being tested:

I was so scared of those tests (like the ACT and the SAT) that I didn't take them. There was a day during my junior year when we were supposed to take the PSAT, so I skipped school that day. Another time I knew that we were moving, so I didn't take it even though I could have.

Too Busy for Accelerated Learning Class

High school students today lead busy lives, and sometimes their schedules conflict with academics. Many students work, play sports, or are in other activities that make it impossible for them to participate in accelerated learning classes, even though they are eligible for them. One high school student said:

I was thinking about taking an AP class, but after football practice you are physically and mentally tired, you won't do the homework, so stay with the regular classes.

The focus group facilitator spoke with several AP teachers who were frustrated that superior students were not taking AP classes because they were too caught up in other activities. One teacher said:

Are there some who should be in these classes? Oh, yes. The problem is conflicts in schedules. Last year, there were 20 kids who were eligible and they chose to do student council instead. They are the shakers and the rollers of the school. They had to decide what to do. Now in the second semester, I am recovering some of them.

Another teacher commented:

Education is not a priority. Sometimes the kids' jobs are their priorities, even sometimes it has to be. Their video game can be their priority.

I see kids who have been up all night playing a video game and not getting sleep.

I'll Get into College Anyway

Realistically, getting accepted into college is not perceived as particularly difficult for most students. Many of these students, for economic and family reasons, were planning to attend a local community college or public university that would likely accept any high school graduate. These students did not really see a need to take accelerated classes, especially if those classes would involve more work. An older college student who returned to college after working in construction noted:

Not everyone can be a Rhodes Scholar, but there are thousands of colleges you can attend. Not everyone will come from a great educational background. I got in with my experience. I won't say it was easy to get into this college. They like to see AP, but they like to have you anyway. For those of us who didn't take AP, and there are many of us, we are doing quite well.

Another college student weighed in:

As long as you go through high school, taking AP courses won't make a difference. If I had a child who went through AP courses, that would be fine, but I wouldn't encourage it. I would encourage them to do more extracurricular activities, rather than AP.

Absenteeism and Frequent Moves

Many students (especially minority students) missed accelerated learning opportunities because of factors such as frequent moves from school to school or absenteeism during the school year. A few years ago, Public Agenda conducted a study similar to this one, which included interviews with a number of Hispanic high school students who qualified for college but did not plan to attend.² In many cases, the parents moved frequently, often for economic reasons or because of a change in their job. One parent in the Public Agenda study told the interviewer that she had moved almost every year, but that she tried to make sure that she never moved during the school year; a student reported that he had been to every school in the district. There was a similar picture for the students interviewed for the current study who did not take accelerated learning classes. One of these students reported having attended five different high schools. Others missed opportunities because they failed to attend so many classes. One college student said:

I was never in those classes. I went to three different high schools. The one did offer those classes, but I only recall them for math, but there was no way I would get into them, so I didn't pay attention to them. My other school was a school for kids who couldn't survive public school because of behavioral problems. I was a bad kid. We didn't have electives. You had four basic classes, and none of them were AP.

A counselor commented:

Absenteeism is a factor for many of our kids; their grades have nothing to do with their abilities but really are about their attendance.

Choosing Between Options

Most of the students who were interviewed were either in a dual enrollment program or in an AP program. As a result, the respondents were not asked to compare these two programs. From talking to each of the groups, however, it was possible to speculate about the comparative advantages and disadvantages of the programs from the perspective of a high school student.

AP Courses: More Challenging But How Will You Do on the Test?

One of the distinctive features of the AP courses is that they are associated with an independent examination. Students who do not get a sufficient score on the test (or who do not take it at all) do not get college credit. The problem is that many students, especially those from underserved populations, do not get a sufficiently high score on the tests to get college credit. As one teacher said:

We have very few kids who are passing the exam, but we have some. That isn't the criteria; the point is that the kids have risen to it. They are improving every day.

AP teachers and high school counselors emphasized that the point of taking the AP classes was not just to get college credit but also for educational enrichment. They cited evidence that students who take AP classes do better in college, even if they do not perform well on AP exams. Here are the views of two AP teachers:

Most students here are not passing the AP exams. We push them to take the AP test, but we point out that it is not the whole measurement of the experience. The statistics show that you will do better having had the AP class.

I'd love to have them pass the test, but the important thing is exposing them to the rigor and the discipline.

Despite these reassurances, does the fact that AP classes are not a guarantee of college credit push some students away from AP? It would hardly be surprising if some students did worry that taking an AP class might mean a lot of hard work with nothing to show for it except a lower grade. One of the high school counselors said this explicitly:

The biggest problem is that test at the end of the school year. As far as the work in the classroom is concerned, you try to handle that issue for the students by telling them that they really can do the work. But they are concerned about the AP test. If they don't score well enough to get college credit, that is where they are disappointed.

In the dual enrollment classes, the situation is different. There, all a student has to do is to pass the class in order to get the college credit. One high school student who had been exposed to both put the choice bluntly:

The only way you could get college credit in AP is to pass the test. In the college courses, if you pass the course you get the college credit. I dropped out of AP biology to take the intro marketing class at the community college because the credit was guaranteed.

This young man was one of the few students who provided a direct comparison of dual enrollment classes and AP classes. The indirect evidence, however, suggests that for some students, dual enrollment might be a less challenging alternative.

This impression was confirmed by what the students said about the level of difficulty of their courses. The AP students often stressed the difficulty and challenge of their courses and frequently mentioned courses in traditionally demanding subjects, such as science or math. The dual enrollment students were more likely to focus on their enjoyment of the college classes and the higher status of being enrolled in college, and they more frequently mentioned taking less technical courses, such as sociology and marketing. For example, several college students said their AP courses were more challenging than their college courses. One put it this way:

Here at college my intro courses were cake compared to the AP classes, and a lot of my 4000 level classes here are easier than my high school classes.

Dual enrollment students did not describe the classes as overwhelmingly difficult. None of the students interviewed mentioned failing to get credit for the

college classes because the work was so demanding. Instead, dual enrollment students were more likely to comment on the prestige of taking college classes. Here are the views of two high school students:

My dad is really excited and brags about how I take college classes.

My dad says, "My daughter is in high school and taking college classes." It makes me feel smart.

One of the high school counselors put this point even more bluntly, saying the advantage of the dual enrollment classes is that they are easier. He saw the dual enrollment courses attractive because they provide a less challenging option for students who are not as bright and motivated as those who take AP:

We have three community colleges that come to our campus. Students here can take either AP or the community college courses. There are a mixture of kids who take the community college courses. The requirement to pass the [community college] course is a 2.5, so we are able to meet some of the middle-of-the-road kids with this program.

The students who took these courses had nothing but good things to say about the college professors who taught them. But several high school AP teachers expressed mixed reactions about the dual enrollment program. They conceded that a well-taught college course could be a wonderful experience for a student. At the same time, they were worried about the rigor of the college classes and raised questions about some of the teachers.

The AP curriculum is better than the dual enrollment. Our kids don't test well, and they don't always get the credit on the test. But the AP program helps give them a lot of learning.

Everything will depend on who teaches [the college course] and what the students get out of it. The claim is: this is a college credit. Your AP course might give you college credit, but this really will. But a college course might not be all that it is supposed to be either.

If you talk to the kids, they will tell you that some of the college teachers aren't so good. They will say, "They are afraid of us, and they don't know how to deal with us."

Some AP teachers see dual enrollment and AP courses as competing with one another. This competition may draw students into one type of accelerated learning option over another and shape the types of courses offered in the future. One said:

By bringing in the college-level courses, you will dilute the AP program. It is like robbing Peter to pay Paul.

Conclusions

The goal of this component of the project was to formulate hypotheses about how students perceive accelerated learning. It is certainly premature, based on this exploratory pilot study, to make definitive recommendations or draw conclusions. Even at this preliminary stage, however, the conversations suggest several policy questions that deserve further study:

- **Upgrade high school counseling.** This study seems to support the notion shown in the research that high school counseling professionals do not have adequate time and resources to do the job that is expected of them.³ Although they certainly reach out to some students, other talented students seem to slip through the cracks, either because the high school counselors do not identify them or do not have time to follow up with them. If the goal is to see more qualified students doing accelerated learning, a larger and better trained counseling staff may be needed, especially in schools with large numbers of minority and other underserved students.

Another issue worthy of discussion is the way some high school counselors presented accelerated learning options to students. The counselors tended to talk about the objective and long-term advantages – but these were less frequently mentioned by students. What the students seemed to respond to most was the experience of the classes themselves.

- **Schoolwide recruiting.** In addition to expanding the counseling function, it might also make sense to train more people in the schools to assist those students who are not identified by school counselors. Repeatedly, there were reports of students who had been “spotted” by someone – a dedicated coach or teacher – and steered into AP courses. It might be useful to train a broad range of staff so that everyone in the school is on the lookout for students who can benefit from accelerated learning. Perhaps this should be made an explicit responsibility of the entire school staff. The goal of this suggestion and the one above is to create a more effective network to identify and support students who should be encouraged to pursue accelerated learning.
- **Better information.** The third part of this strategy is to assist students and parents to understand the benefits of accelerated learning, providing them

- especially those from underserved populations
- with better information about both college and accelerated learning options. Both this study and the study of Hispanic students done by Public Agenda suggest that students whose parents have not gone to college receive poor information and guidance about higher education. Often, parents rely on their children to explain it to them. The students rely, in turn, on what they can learn from friends, relatives, or the media. Reaching these parents will require energy and creativity; many schools have found it difficult to communicate adequately with them. The first step would be to avoid the technical terms that teachers and administrators are so familiar with and express the advantages in direct and simple language.

- **Can dual enrollment and AP exist in harmony?**
If the indications that have arisen from this study are correct, dual enrollment classes and AP classes compete for some of the same students. This can work in favor of the students, who might have a greater selection of accelerated options to choose among. Additionally, they may be able to take an accelerated learning course that most closely fits their learning style and their interests. Some might suggest, however, that the growing appeal of the dual enrollment classes might dilute the impact of the AP program and even lower the overall quality of accelerated learning. This is something that requires further study.

Endnotes

¹ See Chapter 4 of this report.

² John Immerwahr, *With Diploma in Hand: Hispanic High School Seniors Talk about their Future* (San Jose, CA: National Center for Public Policy and Higher Education and Public Agenda, 2003).

³ See for example, Patricia McDonough, "Counseling and College Counseling in America's High Schools" (Alexandria, VA: National Association for College Admission Counseling, 2005).

Chapter 6

Financing Accelerated Learning Options: Understanding Who Benefits and Who Pays

Robert Palaich, Cheryl Blanco, Amy Berk Anderson,
and Jennifer Sharp Silverstein with John L. Myers

Accelerated learning options are widely used across the states - 45 have adopted legislation or regulatory policy on at least one of the four accelerated options examined in this study. The literature, however, contains little data on or analyses of costs, benefits, efficiency and accessibility of these programs. Using three cost-benefit tools found in economic and financial analysis - return on investment, cost to completion, and net cost (or opportunity cost) analysis - the issues of costs, benefits, efficiency, and accessibility can be addressed.

Because of the multiple perspectives involved - those of students and families, schools, school districts, postsecondary institutions, and states - analysis of accelerated learning options is quite complex. To complicate matters, these perspectives are played out across different levels of government and education funding systems. Finally, while low-income students and their families may significantly benefit from participation in these accelerated learning options, data on the extent of their participation and on their successful completion of these programs is usually not widely available.

This chapter describes the financial questions raised by the various stakeholders involved in accelerated learning options, examines financing strategies that are used today in selected states, and describes how financial analysis tools can be used to answer financial questions concerning the different options. It concludes with a discussion of what state policymakers can do to understand the incentives provided by current policy and to encourage greater participation.

The chapter's first section focuses on the costs, benefits, and efficiencies experienced by participants in different options. The second focuses on whether all students have access to accelerated learning options and summarizes the questions policymakers would like to have answered before investing in accelerated learning options.

Costs, Benefits, and Efficiencies

State Perspective

As suggested earlier in this report, policymakers view accelerated learning options as potential investments that could increase the efficiency of the education

system by decreasing time to degree for college students (thereby saving the state money on either average-daily-attendance (ADA) or full-time-equivalent (FTE) funding) or by encouraging more students to successfully complete more advanced degrees (thereby increasing long-term state tax revenue, due to an associated increase in a student's lifetime earnings). By encouraging students to complete a college degree faster through accelerated learning, a state can "recycle" scarce spaces by enrolling additional students.

There is a shared perception that accumulating accelerated learning credits has the potential to reduce time to degree, the savings from which will accrue to the student, the institution, and the state. This position is the basis for policies that subsidize the cost of accelerated learning courses in states like Arkansas, California, Georgia, and Minnesota, where laws mandate that at least part of the cost of accelerated learning courses be covered by state funding.

School District and Postsecondary Institution Perspective

Interest in accelerated learning by school districts and postsecondary institutions has a financial component as well. In some states, schools receive additional funding for these students, and colleges and universities receive full or partial FTE funding for dually enrolled students. In others, like Iowa, high schools must pay the partnering college up to \$250 for college tuition, textbooks, and fees. Elsewhere, colleges face considerable disincentives for participation in accelerated learning programs, especially dual enrollment. The incentives for participation faced by public school districts may or may not be consistent with those experienced by colleges and universities.

Student/Family Perspective

Research suggests that some students with accelerated learning credit graduate from college in less time than their peers who have no such credit on their transcripts. Clifford Adelman studied postsecondary transcript files from three national longitudinal studies conducted by the National Center for Education Statistics. He found that students with accelerated

coursework from high school spent less time completing a bachelor's degree than students with no such credit: "For those who earned at least a bachelor's degree, the more credits earned by examination and in dual-enrollment status, the shorter the time to degree. For those with no acceleration credits, time to degree averaged 4.65 elapsed calendar years; for those who earned nine or more acceleration credits, time to degree averaged 4.25 years."¹

The cost of participating in these programs for students varies according to the program and the locale. Students in exam-based programs like AP and IB can receive financial assistance by having the examination cost paid by other sources: federal and state funding is available for low-income students, for instance. For dual/concurrent enrollment programs, a common strategy to support students' costs is tuition remission. In many instances, the student's family must pay the tuition up front but the states or school districts will reimburse tuition charges if the student successfully completes the dual/enrollment course. Some postsecondary institutions may waive tuition for students for dual/concurrent enrollment courses, as well. A few states' statutes note that students in dual/concurrent enrollment programs are ineligible for direct financial aid through state and federal programs, but in most of these cases, the state or district is paying the cost of tuition. As the institutional survey revealed, other sources, such as foundations and external grants, also may help cover student expenses. Economically disadvantaged students are most likely to receive financial aid, as many states stipulate through legislation that financial need qualifies students for various kinds of assistance, including coverage for tuition, textbooks, materials, and transportation expenses.

Access and Accelerated Learning Options

While federal policy often focuses exclusively on expanding access to populations traditionally disenfranchised from accelerated learning options, and states in general share these access concerns, relatively few state-supported accelerated learning programs, with the exception of Tech-Prep, began with a focus on access. While few state policies are intentionally antithetical to the goals of access, many nonetheless may have the effect of excluding low-income students from active participation. In contrast, a few states have more recently begun to deliberately work toward increasing access through accelerated learning options. Regardless of the approach states have taken up to this point, financing and cost effectiveness issues cannot be isolated from access concerns when examining accelerated learning options. Many believe accelerated learning options will be more

cost effective for the state the more widely available and widely used they are.

Several indicators identified in the research point to "access ineffectiveness" in accelerated learning opportunities. Data on participants in each of the four options included in this study document low participation by students who are economically disadvantaged, live in rural or urban areas, are male, are limited English speakers, and are racial or ethnic minorities. Highlights from the literature include the following:

- Schools with the highest minority enrollment were the most likely to indicate that they did not offer any dual credit or exam-based courses. Twenty percent of these schools indicated that they did not offer any dual credit or exam-based courses, compared with 6 to 12 percent of schools with lower minority enrollment.²
- A study of Minnesota's Post Secondary Enrollment Options (PSEO) program found that while student participation continues to grow, some segments of the student population are underrepresented. "Public school participants in PSEO are disproportionately female and affluent." The report noted that students of color were underrepresented in PSEO programs when compared to their representation in 11th and 12th grades.³
- Connecticut data show that racial/ethnic minorities represented between 21 and nearly 24 percent of all high school graduates between 1998 and 2002; during that same time, the percentage of minority graduates receiving college credits within total graduates ranged from 3.5 to 5.1 percent.⁴

Some districts and states are making concerted efforts to reach out to at-risk high school students and provide both access to and support for accelerated learning options. Hoffman examined dual enrollment programs and found a few states "in the early stages of using innovative forms of dual enrollment not just as a marginal high school option but as an explicit strategy for increasing college credentialing rates and building a better-educated workforce": the Maine Great Schools Project, for instance, "serves disengaged youth, first-generation college goers, and students without a plan for the future."⁵ This and similar programs are in their beginning stages, and information on outcomes is not readily available; but as results of these initiatives emerge, other states will benefit from the lessons learned and the assessments of the different program impacts on increasing access and success for disadvantaged students.

Underrepresentation of economically disadvantaged students and students of color in accelerated learning programs has also been linked to the belief

- held by students, parents, and school personnel
 - that these programs are not appropriate for certain students. Hoffman and Robins studied two Northeastern states; both states had substantial dual enrollment programs embedded in their community and technical college systems and at least minimal financing and governance systems. “Nonetheless, dual enrollment appears to exist ‘under the radar’: it is not considered an accepted and usual aspect of the high school experience for underrepresented students.”⁶ As reflected in Chapter 5, high school counselors sometimes discourage students from academically and economically at-risk backgrounds from taking accelerated learning courses, because they feel it is “not in the students’ best interests” to encourage them to participate in activities in which they are likely to fail. This culture of low expectations has impeded efforts to provide the enriched curricular

environment of accelerated learning options to the most disadvantaged students.⁷

Stakeholder Questions about Accelerated Learning Finance

The questions of interest to those involved in accelerated learning can be most effectively organized from two perspectives: that of those who fund and that of those who participate in the options. Table 6.1 presents the questions of interest to each stakeholder group in the system.

The third section of this chapter will return to these questions in a discussion of the analysis tools that can address them. The next section provides a brief tour of finance strategies used by states to support accelerated learning options. The practices reported here reflect the following: the aspirations a state has for the

Table 6.1. Critical questions asked by stakeholders involved in accelerated learning options

<p>State Leaders</p> <ul style="list-style-type: none"> • What state costs are associated with accelerated learning participation? • What state benefits are associated with accelerated learning participation? • Will an investment in a group of students participating in accelerated learning create a return in state tax revenue? In what time frame? Compared to students not participating? • What would be the state impact of significantly more students participating? • Do the institutions and schools providing these services have the resources necessary to effectively provide the services? • What changes, if any, are needed in state funding? State data collection? • Are there efficiencies associated with either the provision of this service for a single student or for a cohort of students? In what time frame will savings from these efficiencies be realized? • Do all students have an equal opportunity to participate in these programs?
<p>Federal Leaders</p> <ul style="list-style-type: none"> • What federal costs are associated with accelerated learning participation? • Will an investment in a group of students participating in accelerated learning create a return for federal coffers? In what time frame? • What is the impact on the U. S. workforce? • What would be the federal impact of significantly more students participating? • What changes, if any, are needed in federal funding? Federal data collection? • Do all students have an equal opportunity to participate in these programs?
<p>Postsecondary Institution Leaders</p> <ul style="list-style-type: none"> • What postsecondary institution costs are associated with participation? • What postsecondary institution benefits are associated with participation? • Does the postsecondary institution providing these services have the needed staff and discretionary resources? • Is this effort sustainable over time? • What changes, if any, are needed in formula funding? • What would be the impact of significantly more students participating? • Are there postsecondary institution efficiencies either in the provision of this service for a single student or for a cohort of students? If yes, how can these efficiencies be realized? • Do all students have an equal opportunity to participate in these programs?

Table 6.1 (continued). Critical questions asked by stakeholders involved in accelerated learning options

<p>School District Leaders</p> <ul style="list-style-type: none"> • What school district costs are associated with participation? • What school district benefits are associated with participation? • Does the school district providing these services have the needed staff and discretionary resources? • Is this effort sustainable over time? What changes, if any, are needed in formula funding? • What would be the impact of significantly more students participating? • Are there school district efficiencies either in the provision of this service for a single student or for a cohort of students? If yes, how can these efficiencies be realized? • Do all students have an equal opportunity to participate in these programs?
<p>School Leaders</p> <ul style="list-style-type: none"> • Does the school providing these services have the needed staff and discretionary resources? • Is this effort sustainable over time? What changes, if any, are needed in funding? • What would be the impact of significantly more students participating? • Are there school efficiencies either in the provision of this service for a single student or for a cohort of students? If yes, how could these efficiencies be realized? • How are students recruited for participation in accelerated learning programs? • Do all students have an equal opportunity to participate in these programs?
<p>Students and Their Families</p> <ul style="list-style-type: none"> • What student costs are associated with accelerated learning participation? • What student benefits are associated with accelerated learning participation? • Will the investment by a family and student participating in accelerated learning create a significant return for the student? In what time frame? Compared to what? • What credit is given for participation? What is the value of that credit? • Does the student (and family) have the discretionary, up-front resources needed to participate in the accelerated learning option?

particular accelerated learning option; the state's working estimate of answers to the above questions; and the formality by which the state expects its accelerated learning policies to be carried out. While the vast majority of states have accelerated learning policies, the associated financing practices in some states for some options are well defined and involve significant resources, while for others the financing practices are quite limited.

Finance Practices that Support Accelerated Learning Options

This section describes funding practices associated with accelerated learning options, beginning with a general description of the major funding sources for each of the selected accelerated learning options and then providing a more detailed description of how the funding of these options occurs in certain states.

- **Advanced Placement (AP).** AP courses are funded by a variety of sources, including federal, state, and local monies. At the federal level, since 2001 the U.S. Department of Education's Advanced Placement Incentive Program has awarded grants ranging from \$22 million to nearly \$30 million

annually to state education agencies and local education agencies to increase the successful participation of low-income students in Advanced Placement courses and examinations. Funded projects use their grants in a number of ways: providing professional development for teachers to increase the number of educators prepared to teach AP and pre-AP courses, subsidizing the cost of AP courses online, and covering the cost of AP examinations for low-income students.

In addition to the federal funds, individual states may allocate significant monies to support AP classes. Florida appropriated over \$56 million in 2005-06 for incentive funding for AP. This figure does not include \$2.3 million for AP teacher training and other activities.⁸ It is also in addition to the regular per-pupil funding that the state and local school district invest in each student. School districts use these dollars to award teachers bonuses for each student who earns a 3 or better on an AP examination.⁹ California allotted more than \$30 million in its 2001 budget.¹⁰ The actual cost of taking an AP examination may also be borne by the state, or the student, or be shared by both. The College Board reports that worldwide,

1.1 million students took nearly 1.9 million AP exams in 2004.¹¹ A recent initiative by the National Governors Association (NGA) has awarded \$500,000 grants to six states to work in partnership with the College Board and NGA's Center for Best Practices to improve disadvantaged students' access to and success in college-level AP courses. Arkansas, California, Georgia, Minnesota, and several other states have statutes focused on state support for the cost of AP exams.

- **Dual/Concurrent Enrollment.** With this option, financing is more complex. Funds for dual/concurrent enrollment come from state, school districts, and postsecondary institution sources. The financing takes various forms; in some cases, both colleges and schools receive funds for dually enrolled students (i.e., Arizona, California, Colorado, and Illinois); in others, only one institution's ADA or FTE funding is affected by dual/concurrent enrollment students (i.e., Indiana and Tennessee). In states like Texas and Washington, high schools lose per-pupil funding for every student dually enrolled. In some cases, both high schools and colleges lose funds, as in Georgia, North Carolina, and Ohio.¹² In some instances state policy is silent on funding (i.e., Alaska, Connecticut, Louisiana, New Hampshire, and Vermont); others specify how funds will be allocated to high schools and colleges (i.e., Florida, Iowa, Maine, Montana, and West Virginia).¹³
- **International Baccalaureate (IB).** IB Diploma Programs are generally supported through state and local funds, while examination expenses may also be subsidized through the U.S. Department of Education's Advanced Placement Incentive Program grants. As noted in Chapter 2, only 12 states have any statutory language related to the IB program. These show little consistency. California requires school districts that operate an IB program to annually report the amount of money spent by the district on the program. Under Minnesota law, the legislation provides for the payment of IB examination fees for students from low-income families. Oklahoma subsidizes teacher training for IB courses, gives \$100 to the district for program development for each student who scores a 4 or better on an IB examination and pays a share of the test fee for financially needy students. In 2005-06, Florida appropriated \$17 million on incentive funding for IB. This figure is in addition to the regular per-pupil funding that the state and local school district invest in each student. The Florida incentive bonuses are awarded to teachers based on the number of students that score above a certain level on IB examinations.¹⁴

- **Tech-Prep.** This option receives state and local funding similar to that provided for non-Tech-Prep students. In addition, it also receives substantial dedicated funding from the federal government through the Carl D. Perkins Vocational and Technical Education Act. Many of the postsecondary components of Tech-Prep generate substantial tuition income, as well.¹⁵ As a result, Tech-Prep students are funded much more generously than students in any other accelerated learning program. Yet Tech-Prep funding is rarely referenced in state statutes, in part because the states generally funds these students "comparably" to other students; in addition, the substantial federal role is not referenced in state policy.

The 50-state policy inventory presented in Chapter 2 suggests that one of the more popular components of legislation addressing AP, dual/concurrent enrollment, IB, and Tech-Prep relates to financing - including who pays, who receives payment, and what is included in covered expenses. A review of the inventory concludes that two different philosophies provide the foundation for these efforts. The first approach is concerned with providing incentives to motivate students to pursue more rigorous learning. The second focuses on achieving greater efficiencies in public pre-K-16 education by getting students through their formal schooling more rapidly.

Multiple funding strategies are being used by states, and these funding strategies are often applied differently across the four accelerated learning options.¹⁶ What follows is a more detailed description of funding practices in selected states that have active policy behind each of the four accelerated learning options.¹⁷

State-Specific Funding Practices for Advanced Placement

AP is a cooperative educational program between the College Board, secondary schools, and colleges and universities. Started in 1955, AP provides high school students with the opportunity to take college-level courses in a high school setting. Students who take AP courses not only receive college-level instruction, but have the opportunity to earn college credit by taking the course and earning an acceptable score on the AP exam. The AP courses are free of charge but each AP exam costs students \$82. This cost is sometimes offset by funds from federal, state, and local sources but most often it is paid by the student. Currently, there are 35 AP courses in 20 subject areas. The program is offered in more than 60 percent of high schools in the U.S.

Vastly different emphases are placed on AP support within districts in the same state. The majority of AP funding is derived from the traditional per-pupil allocation, made up of combined state and local school district revenue. A small but important amount is passed by the state to local school districts from the U.S. Department of Education. These pass-through resources, plus local school district and student contributions, make up the funding behind AP programming. Minnesota and Florida provide typical examples of how states finance AP programming.

Minnesota

Demographics. Minnesota's public school enrollment for grades nine through 12 in 2004-05 was 281,781 students in over 400 public high schools, plus 13 K-12 schools. The AP program is offered in 177 public high schools and 33 non-public high schools. At least 90 percent of the 35 AP courses in the 20 subject areas are offered in Minnesota. In 2004-05, 18,902 students took 29,480 exams. Minnesota tracks AP students by the number taking the AP exam, not by the number of students enrolled in AP classes.

Finance. In 2002-03, the state's average expenditure per pupil was approximately \$8,100. The state spent \$542,778 on teacher training and exam subsidies (public and non-public) in 2004-05. In 2006-07, the budget increases to \$3,375,000. This additional money will be spent on increasing exam subsidies and the number of AP classes through more teacher training and the purchase of needed classroom materials.

Florida

Demographics. In 2004-05, the state's 9th to 12th grade enrollment was 781,978. There are 433 high schools in the state in 67 school districts. Florida only collects data for the AP program at the district level. In 2003-04, 61 school districts offered AP classes to 130,747 students. According to the *Advanced Placement Report to the Nation, 2005*, in 2004, 37,165 students in Florida high schools took AP exams.¹⁸ All 35 AP classes were offered in the 20 subject areas.

Finance. In 2002-03, Florida's average expenditure per pupil was \$6,439. Florida does not track funding for the Advance Placement program. Rather a value of 0.24 full-time-equivalent student membership is added for each student in each Advanced Placement course who receives a score of 3 or higher on the College Board Advanced Placement examination for the prior year. The total additional full-time-equivalent student membership is also added to the basic program student count for grades nine through 12 in the subsequent fiscal year. Each district must allocate at least 80 percent of the funds earned by the Advanced Placement FTE to Advanced Placement instruction.

Additionally, the state requires that school districts provide financial bonuses to teachers. A bonus of \$50 is given to AP teachers for each of their students who receives a score of 3 or higher on the Advanced Placement examination. Teachers working in schools receiving a failing grade — "D" or "F" — receive an additional \$500 if at least one student scores 3 or higher on the Advanced Placement examination, regardless of the number of classes taught or of the number of students scoring a 3 or higher. There is a \$2,000 limit for teacher bonuses in a given school year.

A more detailed picture is provided through a more specific focus on one school district.

Orange County Public Schools, Florida.

Demographics. Orange County Public Schools (OCPS) had 50,511 students enrolled in grades nine through 12 in 2004-05. There are 17 high schools in the district. Of these, 16 schools offer AP classes. The other high school is a small Tech-Prep magnet school. The district offers 34 of the 35 AP courses. The districtwide enrollment in AP classes in 2004-05 was 9,414 students. Of those, 8,855 took the AP test in 2004-05.

Finance. The district's 2004-05 per-pupil expenditure was \$6,237. No figures are available on district spending on the AP program. The major expenditure items are AP exams, AP teacher training, and AP exam reviews. District officials indicated that AP teachers' salaries, classroom textbooks, equipment, and room space would have to be factored into any cost estimate. The district's Advanced Studies Department has written and received numerous grants which fund AP workshops for teachers, AP test subsidies, and activities aimed at increasing student participation in higher-level courses. The district received approximately \$5.2 million from the state for AP programming. The district does not track private contributions; however, businesses, hotels, and churches sometimes provide their facilities for AP exam administration at no cost. Orange County Public Schools works with two postsecondary institutions on the AP program.

State-Specific Funding Practices for Dual/ Concurrent Enrollment

Dual enrollment, also known as dual credit, concurrent enrollment, college in the schools, and joint enrollment, refers to programs that allow high school students to participate in college courses and possibly earn college credits. These programs provide students with access to more rigorous academic and technical courses, saving time and money spent on earning a college degree, and enhancing admission to

and retention in college. The dual enrollment programs provide a pathway for students to move seamlessly between K-12 and postsecondary systems and are thought to promote greater support for students' college aspirations and greater collaboration between high schools and colleges. According to Chapter 2 of this report, 42 states have enacted dual/concurrent enrollment policies.

Dual credit courses can vary according to: how they are offered (individually or in a sequence of courses); who teaches the course (high school instructors and/or postsecondary instructors); who is served (only public high school students or a mixture of public high school students and postsecondary students); and how the college credit is awarded (immediately upon course completion or after the student graduates from public high school and attends a specific postsecondary institution).

Minnesota and Washington, like many other states, have implemented dual/concurrent enrollment policies and have addressed the financing of their plans. Both states have two different dual/concurrent enrollment programs: the traditional postsecondary options program and a college in the high schools program. The traditional postsecondary options programs are funded by the states, while the colleges-in-the-high schools programs are paid for by students. Minnesota's Postsecondary Enrollment Options (PSEO) program penalizes school districts by recapturing "lost seat time" funds for students attending college classes. Washington's Running Start program prescribes that colleges get 93 percent of funding and allows the high schools to keep 7 percent. The details follow.

Minnesota

Demographics. Minnesota has two distinct dual/concurrent programs, College in the Schools and PSEO. These two programs serve students in at least 200 of the state's 443 public high schools and 13 K-12 schools. In 2004-05, 14,000 students had filed a form with the state indicating their interest in pursuing dual credit. Of those, 12,000 students are still actively enrolled at their designated high school and 2,000 are full-time at a college campus. Enrollment figures show that participants are 65 percent female, and 76 percent of the students are high school seniors. The state does not collect data on the number of classes taken: instead it tracks the number of credits earned. In 2004-05, 120,586 credits were earned by students.

Finance. The state spent \$19.2 million on PSEO enrollment programming in 2004-05. It is important to note that the \$19.2 million includes public, home, and private school students.

The programs are funded differently. The PSEO program is funded directly from the state's general fund. The state pays the postsecondary institutions directly for each credit a student takes; in 2005-06, the rate was \$166.57 per credit hour. But high schools end up losing revenue when students take part in the PSEO program. To take a class at the local community college, a student might have to miss three full periods at his or her high school, between class and transportation time. The state takes into account that the student missed three class periods and takes that proportion of the student's per-pupil revenue away from the school. This money is returned to the general fund and can be used at the state's discretion.

Because of this loss in revenue, many school districts are beginning to offer College in the Schools programming. College in the Schools classes are taught at the high school by qualified instructors, and students earn college credit. In most cases, the students themselves pay a discounted tuition fee for these courses. No state assistance beyond the regular per-pupil revenue is offered for this program.

Washington

Demographics. Washington has approximately 325,000 students in grades nine through 12 in 335 high schools. Running Start (RS) and College in the High Schools (CHS) are two Washington programs that allow students to earn college credit while still in high school. About 19 percent of Washington's juniors and seniors participated in dual enrollment programs in 2004-05. Of these, 15,741 participated in Running Start, and 1,756 participated in College in the High School. Although the programs grew very quickly initially, participation has stabilized at about 10 percent of the student population; most participants are juniors and seniors. While all types of students participate, the state acknowledges that access is not equitable. In the case of Running Start, the long distance between high schools and college campuses in some areas creates problems. And for the poorest students, there are incidental charges that create financial barriers, despite the state tuition subsidy.

In 1990, the state legislature created Running Start as a part of the "Learning by Choice" law, which was designed to expand educational options for students. Initially, a two-year pilot program was authorized. Five community colleges were selected to participate in the pilot. The pilot program involved 358 students from 37 high schools. In 1992-93, the program became available statewide. Approximately, 3,350 students enrolled at the community and technical colleges in the first year. In 1994, to provide Running Start access to communities where no two-year colleges were available, the program expanded to include three state universities.

In 2003, a fourth institution was added to the list of universities eligible to offer Running Start; a tribal college was added in 2005.

All high schools students who have reached junior status are eligible for Running Start. Students apply at their high school and, when deemed eligible, apply to the college. To be deemed eligible by the college, students take placement tests and then are dual enrolled. They may be enrolled full time at the college; in fact, they may enroll in both high school and the college classes in such a manner that their FTE at both institutions could be greater than 1.0. The students may choose any courses, but the high school determines how the courses apply to graduation requirements. For example, some English courses count towards graduation while others are elective credits.

The College in the High Schools program differs from Running Start in that high schools provide courses on their campus. These courses must be college level, academic, included in a college or university catalog, and taught as part of a regular college or university curriculum. There is no funding mechanism to support CHS courses, so students cover the costs themselves. This lack of funding has resulted in only a limited number of CHS courses being offered around the state. Table 6.2 shows the growth of both Running Start and College in the High Schools.

In 2004, Washington's legislature extended the state's commitment to addressing the challenge of transition from high school to college by clarifying the mission of the Higher Education Coordinating Board. With the passage of HB 3103, the legislature called on the board to do the following:

Work with the state board of education, the superintendent of public instruction, the state board for community and technical colleges, the work force training and education coordinating board, two- and four-year institutions of higher education, and school districts to improve coordination, articulation, and transitions among the state's systems of education. The goal of improved coordination is increased student success. Topics to address

include: expansion of dual enrollment options for students; articulation agreements between institutions of higher education and high schools; improved alignment of high school preparatory curriculum and college readiness. (2004 c 275 § 17; 1994 c 222 § 3)

Finance. In 2005, Washington schools spent an average of \$7,876 per student. Running Start is fully funded by the basic education allocation provided by the state to the schools. Each year an average per-pupil cost is determined for schools around the state and is used for Running Start. When a student is determined to be eligible by the high school and the college, the high school reports and claims that student for RS funding. The high school receives the full basic education per pupil amount and then must pass 93 percent of the funds to the college. The 7 percent is retained for administrative purposes. For an academic class, the high school receives \$4,166; for a technical course, there is an enhancement of \$769, for a total of \$4,935. The basic education amount is for a full-time-equivalent student. In college, that means five classes, but a 5:1 ratio conversion to the high school credits is allowed. This is important because Washington's K-12 funding is based on student time in attendance, and the college credits are not time based. Finally, it is important to note that colleges may not charge students fees that would constitute tuition, but only incidental fees, such as computer lab fees. A typical student pays about \$250 out of pocket.

State-Specific Funding Practices for the International Baccalaureate Program

The International Baccalaureate (IB) Diploma Program is being implemented in 624 "IB World Schools" in the U.S. Fifty-six schools offer the primary school program, 163 schools offer the middle school program, and 479 schools offer the high school program. The first school was authorized in 1971. One of three IB programs is aimed towards high-school age students.

Designed for highly motivated secondary school students, the IB Diploma Program is a demanding

Table 6.2. Enrollment and Percent Changes in Washington's Running Start and College in High School

	2000-01	2001-02	2002-03	2003-04	2004-05
Running Start (Contract)	13,442	13,967	14,682	15,295	15,741
Percent Change	2.7%	3.9%	5.1%	4.2%	2.9%
College in High School (Contract)	1,296	1,605	1,532	1,153	1,756
Percent Change	31.0%	23.8%	-4.5%	-24.7%	52.3%

Source: State of Washington, State Board for Community and Technical Colleges, Academic Year Report 2004-2005, December 2005.

pre-university course of studies, leading to a series of culminating examinations. Diploma candidates are required to study six subjects from six subject groups: at least three must be taken at the higher level and three at the standard level. Students must also enroll in an integrated, thematic two-year course of study which emphasizes critical thinking. They must also complete 150 hours of community service.¹⁹

Minnesota and Oklahoma have tried to improve access to IB via subsidies for low-income students to take the IB tests (however, this investment is relatively low). In both states, incentives, policies, and funding encourage schools and families to participate in IB. Like AP courses, IB programs tend to emerge where there is local interest, though IB is less well known. Like AP, however, IB typically requires some type of investment from students for tests and districts for program support, and both of these tend to be more likely to occur in wealthier communities.

Minnesota

Demographics. Minnesota has more than 400 high schools. Of those, 11, located in eight school districts, offered IB programs in 2004-05. In these, 1,300 students took 3,012 IB exams. Exams are graded on a scale of 1 to 7; in order to receive college credit, students must score a 4. According to Minnesota statute, state colleges and universities must award college credit to students who receive scores of 4 or higher. These institutions have come together to develop common policies and practices for students who complete an IB diploma. Such students can receive up to 30 semester credits from a university, amounting to up to one full year of college credits for courses completed in high school. A student who successfully completes the IB Diploma Program with a combined score of 30 or higher will be offered 12 quarter or eight semester credits for each of the three higher-level examinations, plus three quarter or two semester credits for each of the standard-level exams, for a total of 45 quarter or 30 semester credits.²⁰

Finance. The commissioner of education must determine annually how much state support will be allocated in two areas: funding to pay for teachers to attend IB training programs (and to pay for substitutes in their absence); and funding to pay for all or part of the student fees for IB exams. The state will pay exam fees for students at all public and non-public schools who are from low-income families. It also pays a portion of the fees for other students. In 2004-05, Minnesota spent \$171,654 to support high school IB programs. For 2006-07, the state has allocated \$1.125 million for more exam subsidies, teacher training, and new courses and materials.

Oklahoma

Demographics. Oklahoma enrollment in grades nine through 12 in 2004-05 was 176,524 students. These students attended 467 high schools. Of those schools, two high schools in two school districts offered the IB program in 2004-05. One of them, Booker T. Washington High School, had 119 students take 382 IB exams in May 2005.

Finance. Oklahoma's Advanced Placement Incentive Program provides support for International Baccalaureate and Advanced Placement programs in high schools across the state and is administered by the Oklahoma Department of Education. The state provides funding to: pay for a portion of teacher training expenses for IB courses; and subsidize fees for IB exams for students who demonstrate financial need or who take more than one IB exam over a one-year period. In addition, the state offers incentives of \$100 to schools for each score of 4 or better on IB exams taken by their students. These funds are to be used to support expenses related to program development.²¹ IB policies developed by the University of Oklahoma allow students to receive college credit for higher-level IB courses when the student earns a score of 4 or better on IB exams. College credit is generally awarded on a course-by-course basis. A total of 10 courses have been approved for credit by the university.

In 2004-05, the state of Oklahoma spent \$36,300 to support the IB programs. As per state statute, these funds were distributed in the form of grants to support teacher training, exam subsidies, and incentives for schools where students scored four or higher on IB exams. Further, the support of IB from postsecondary institutions has raised awareness about and gives credibility to IB and provides opportunities for students to receive substantial college credit for successful IB completion.

State-Specific Funding Practices for Tech-Prep

The Tech-Prep Demonstration Program is housed in the Office of Vocational and Adult Education (OVAE) within the U.S. Department of Education. Tech-Prep combines a minimum of two years of secondary education with at least two years of postsecondary education. Programs integrate academic, vocational, and technical instruction with technical and workforce experience and preparation, resulting in an associate's degree or technical certification upon completion of the program. Funds from the federal government flow through states to local consortia that carry out the implementation of the Tech-Prep program. Consortia must include representation from local school districts and community colleges. Most also include some

partnerships with local businesses and technical institutions. In fiscal year 2004, OVAE awarded grants to 14 consortia; North Carolina was one of the grantees. The average grant size was approximately \$700,000 per consortia, and the total amount awarded nationally was just under \$5 million.²²

North Carolina

Demographics. All of North Carolina's 359 high schools have Tech-Prep programs. Of the 359, 115 students enrolled in high schools statewide, approximately 25,000 (6 percent) of students completed Tech-Prep programs in 2004-05.

North Carolina is unique in its recognition of the value of Tech-Prep. In 2000-01 the state revised its graduation standards to include Tech-Prep as one of the four approved courses of study required for graduation. In addition to Tech-Prep, the other three approved courses of study are: Career Prep (allows a student to focus on a career in the arts or technical fields, and does not require partnership with postsecondary institutions); College/University Prep (for students who plan to attend a four-year institution); and Occupational (for students with individual educational plans). Ninth graders entering high school in North Carolina are required to select and complete one (or more) of four courses of study in order to graduate. All courses of study require a minimum of the following credits to graduate: four credits of English; three credits of science; three credits of mathematics; one credit of health/P.E.; and three credits of social studies. In addition, students in Tech-Prep are required to complete four credits in selected courses appropriate for their career pathway (and one of the courses must be at the advanced level).²³

Finance. North Carolina does not provide direct funding for Tech-Prep to local school districts. It does, however, employ personnel to oversee the implementation of the program and to work with local school districts and postsecondary education institutions that have received federal Tech-Prep demonstration grants.

North Carolina distributed \$3,108,949 in federal Tech-Prep grants from OVAE to local consortia in 2004-05. Consortia apply for grants every two years. Two types of grants may be awarded: enhancement grants are for the continuation of existing Tech-Prep initiatives, and innovation grants, which fund the sharing of best practices from consortia that can demonstrate successful approaches to using Tech-Prep to improve student performance. Each consortia receives enhancement grant-funding based on a formula: one-third goes to the community colleges, and two-thirds goes to the school districts. On average, each high school that participates in a consortium receives \$7,000 per student per year from this fund. Allocation

of funding from innovation grants varies by site and is based on the activities described in the grant.

North Carolina has made a significant commitment to Tech-Prep by integrating it into its graduation requirements. While many states have Tech-Prep programs, more students than average tend to participate in Tech-Prep in North Carolina as a result of the state's commitment to this course of study.

Addressing Critical Questions: Analysis Tools

This report's review of state and district policies and financing practices to support accelerated learning options indicates that this is an emerging policy field that has received significant attention in only a handful of states. Without federal support for Advanced Placement, International Baccalaureate (using federal advanced placement funding) and Tech-Prep, these options would likely receive significantly less funding due to complete reliance on state and local sources. Districts choosing to implement these accelerated learning options would be on their own. As indicated earlier, more affluent districts would most likely be the ones to get involved: funding would most likely be drawn from gifted and talented allocations. All the student selection processes built into gifted programs would then be applied to participation in accelerated learning options.

To generate a more reliable targeted funding stream for accelerated learning options, advocates need to engage political leaders at the local, state, and federal levels and effectively present the benefits of investing in these programs. The financial case for investment must address the critical questions raised by accelerated learning stakeholders identified earlier in this chapter. Answers to these questions can be determined using three cost-benefit tools found in economic and financial analysis.

Cost-benefit analysis uses financial estimates to provide the equivalent monetary value of a project in order to determine whether the project is worth the cost of investment. A worthwhile project is one for which the value of the benefits exceeds the value of the costs. In the field of education, cost-benefit analysis can be calculated in three ways: as a return on investment, a cost to completion, or a net cost (or opportunity cost). The methodologies used in these tools are similar. All require a determination of costs and benefits and use that data to calculate a return. Applying these computations to accelerated learning is complex because each stakeholder involved perceives a different set of costs and benefits associated with participation and therefore employs different criteria for determining if the accelerated learning option is cost effective. The benefits that accrue to one group

may be irrelevant to another. Finally, these calculations must be run simultaneously because a change in costs or benefits for one stakeholder may change the results for another. This section briefly introduces the tools, describes which tools address which questions, and discusses what a state needs to do to apply these tools to its own situation.

Return on Investment Analysis

The return on investment (ROI) analysis tool is a measure that tabulates the costs and the benefits associated with the program from a given stakeholder's perspective over a significant time period (10 to 25 years). This calculation requires the determination of two quantities. First, the total financial benefit of the program must be estimated. Total benefits include money saved (including additional social costs avoided, like welfare and juvenile justice), money made, and anything that adds directly or indirectly to the bottom line. Second, the total cost made to develop, produce, and deliver the program must be determined. Total cost includes development costs, personnel costs, overhead, physical materials, and support costs. The results from a return on investment analysis are always presented as a rate or percentage. The ROI calculation summed over all students in the cohort is:

$$\text{ROI} = [(\text{total benefit} - \text{total costs})/\text{total costs}] \times 100$$

The ROI rate for successfully completing four AP classes (with a score of 4 or higher on the AP exam) can be compared with the ROI of successfully completing four traditional high school classes in the same subjects. The benefits and costs of successful completion of four AP classes can be compared to the benefits and costs that would have occurred otherwise. If the ROI rate for a student successfully completing four AP classes is greater than the ROI for another student successfully completing four traditional high school classes, then the conclusion can be drawn that AP classes have a positive return on the investment. If the analysis is to be done for a cohort of students, then data needed for the analysis must include the percentage of students participating in the accelerated learning option and in the traditional program.

In a recent study, such an analysis was undertaken for the Early College High School (ECHS) initiative, partially funded by Jobs for the Future (JFF).²⁴ The ECHS initiative is dedicated to helping traditionally underserved students successfully move from secondary education to degree completion in postsecondary education. The immediate goal is to have all ECHS students attain their high school diploma and their associate's degree (or certification equivalent) by the end of their high school years. In addition, it is hoped

that a significant number of these students will go on to complete their bachelor's degree.

The firm of Augenblick, Palaich and Associates (APA) was hired to create a financial analysis model, with a focus on the return on investment in ECHS schools. APA developed a model for analyzing ECHS benefits and costs across K-12 and postsecondary education boundaries and examined the effectiveness of that model with data available from ECHS sites in California and New York. The estimates of the ROI analysis reported by APA make the case for the following conclusions.

- Students and families benefit from participation in ECHS schools.
- ECHS schools generate more benefits for their students and a greater return on investment than comparable traditional high schools.
- States also benefit from investing in ECHS sites, as long as the ECHS cost structure is not too different from the cost structure of a traditional high school. Over the 15- and 25-year time frame reported by APA, both sample states recouped their initial investment in the student cohort.

Cost to Completion Analysis

The cost to completion (CTC) analysis tool is a measure of the costs associated with the attainment of a particular education goal by a particular student or set of students. Benefits in this analysis are completely "capitalized" in the education goal chosen to be completed, which means that once the goal is chosen, there is no additional benefit calculation. Time is allowed to vary (it takes certain students longer to reach the goal than others). Two important calculations are made. First, the time it takes a student to achieve the goal (or the average time it takes a cohort of students to achieve the goal) must be determined. Second, the total cost to develop, produce, and deliver the program must be computed. The results of a CTC analysis are always presented as a cumulated total dollar figure. The CTC calculation is:

$$\text{CTC} = \text{total annual costs per year summed over the years in the program}$$

Cost to completion would typically be tied to achieving a particular education goal, such as earning a high school diploma, earning an associate's degree or earning a bachelor's degree. In the accelerated learning option context, the question presented is whether successful completion of AP courses, dual/concurrent enrollment classes, an IB program, or a Tech-Prep program reduces the CTC for a particular

education goal. This CTC figure can then be compared to the CTC for those students who did not participate in an accelerated learning option.

A 1998 study on the effect of school size on costs in New York City public high schools effectively used CTC analysis.²⁵ This study, sponsored by the Institute for Education and Social Policy and the Robert F. Wagner Graduate School of Public Service at New York University, assessed the impact of school size on the cost of producing a high school graduate. The study reported that the literature on the relationship between the size of a school's student body and school outputs was unambiguous. Smaller schools show better outputs than larger schools. The literature on the relationship between the size of a school's student body and school costs was less clear, although no study showed that schools with fewer than 900 students have lower per-pupil costs than larger schools.

The 1998 paper also asserted that studies of outputs almost never include school costs and studies of costs only occasionally include outputs. School costs needed to be looked at in conjunction with outcomes and school size in both theoretical analyses and empirical studies. How well students do in school, and not simply the size of the student body, obviously affects the cost of educating students. Students who take more than four years to graduate, for example, will cost more than those taking only four years to graduate. A greater number of students taking more than four years to graduate raises the cost per graduate.

The 1998 study successfully integrated resource inputs and school-level outputs. It found that size of the student body is an important factor in relation to costs and outputs and that the cost for small academic and articulated alternative high schools are among the least per graduate of all New York City high schools. Though these smaller schools had a somewhat higher annual cost per student, their higher graduation rates and lower dropout rates produced nearly the lowest cost per graduate in the entire New York City system.

Net Cost (or Opportunity Cost) Analysis

Finally, the net cost (NC) or opportunity cost analysis tool is the shortest-term measure of the costs and the benefits associated with accelerated learning options. The net cost analysis tool assumes that the program is beneficial and measures whether the yearly cost of participation in an accelerated learning option is offset by revenues from all sources. For schools, school districts, and postsecondary institutions, the question is whether costs of providing accelerated learning services are covered by the revenue available. For an individual student and his or her family, the opportunity cost reflects the out-of-pocket expenses needed to participate in the option. If the opportunity cost for

students is too high, the assumption is that fewer students will elect to participate in the program.

The net cost or opportunity cost accumulates during the years of participation in the option and directly relate to whether a participating organization or student can afford to participate. To determine net cost, two calculations are made. First, the number of years a student (or a cohort of students) participates in the program is determined. This determines the sustainability of participation. Second, the total annual cost to deliver the program and the total annual "revenues" available to offset those costs are computed. The results from a net cost analysis are always presented as a plus or minus dollar figure. The net cost calculation is as follows:

$$\text{NC} = \text{total annual costs per year minus offsetting "revenue" summed over the number of years in the program}$$

The net cost varies widely across organizations and students participating in the accelerated learning option. Again, calculating the net cost for an alternative program route allows the comparison of the marginal net cost for the accelerated learning option.

A few states have begun to estimate the savings to the state and families using a cumulating net cost analysis. Minnesota reported that financial benefits to individual students, their families, and state taxpayers for participation in the state's dual enrollment program appear to be occurring, but the benefits need further examination. In 2001, Minnesota State Colleges and Universities (MnSCU) estimated that the state government, the federal government, parents, and students saved \$45 million. "State savings account for nearly \$32 million of this total and family/students savings approximately \$11 million. This analysis took into account the retention rate within the system, state subsidies to postsecondary institutions and state financial aid. These figures are for MnSCU institutions, which account for approximately 74 percent of the postsecondary enrollment option enrollments. Additional savings would be realized for programs at the University of Minnesota and to a lesser extent at private colleges."²⁶ While these savings are significant, they still represent only about 2 percent of the more than \$2 billion spent in state and local funding and tuition payments in Minnesota each year.

In Washington State, the Running Start program reportedly saved taxpayers \$36.4 million in 2003-04. According to a Running Start progress report, "Students and their parents also save because Running Start classes are offered tuition-free. In the last academic year [2003-04], this resulted in a savings of about \$23.1 million in tuition. The total amount saved by taxpayers,

parents and students is estimated at more than \$59 million,²⁷ a small percentage (about 3 percent) of the nearly \$2 billion that Washington taxpayers and families provide for higher education each year.

Matching Analysis Tools to Stakeholder Questions

The different stakeholders involved in accelerated learning options - state leaders, federal leaders, postsecondary institutions, school districts, schools, students, and families - have different questions and concerns about accelerated learning options. Unfortunately, no one analysis tool addresses all of these questions. All three tools must be used in combination to address the concerns of all stakeholders and to make a determination of the costs, benefits, efficiencies, and incentives built into a given state's accelerated learning option policy structure. The discussion that follows indicates which tools best address questions.

The ROI analysis tool does an excellent job of identifying long-term costs and benefits for all stakeholders in the system. For state leaders and students and their families, for instance, it answers the following questions:

- State Leaders:
 - What state costs are associated with accelerated learning participation?
 - What state benefits are associated with accelerated learning participation?
 - Will an investment in a group of students participating in accelerated learning create a return for state coffers? In what time frame? Compared to what group of students?
- Students and their Families:
 - What student costs are associated with accelerated learning participation?
 - What student benefits are associated with accelerated learning participation?
 - Will the investment by the family and student in accelerated learning create a significant return for the student? In what time frame?

The CTC analysis tool does an excellent job of identifying intermediate-term costs and benefits for institutional stakeholders (state and federal government, postsecondary institutions, school districts, and schools). This tool's most important use is to help them address the following questions:

- Are there efficiencies in the provision of this service for a single student or for a cohort

of students? In what time frame can these efficiencies be realized?

- What would be the impact of significantly more students participating?

The NC (or opportunity cost) analysis tool does an excellent job of identifying the immediate-term costs for all stakeholders (state and federal government, postsecondary institutions, school districts, schools, and students/families). This tool's most important use is to help them address the following questions on an annual basis:

- Does the organization providing these services have the needed staff and discretionary resources?
- Is this effort sustainable over time?
- What changes, if any, are needed in funding mechanisms?
- Does the student (and family) have the discretionary resources needed to participate in the accelerated learning option?

Analyzing Access and Equal Opportunity

The analysis of access and equal opportunity found within accelerated learning options using ROI, CTC, and NC analysis tools is possible, but complicated. Overall figures for individuals or a given student-serving organization must be broken down into the appropriate racial/ethnic or socioeconomic categories. Education and political leaders familiar with the accountability requirements of the No Child Left Behind Act understand the use of these subcategories to disaggregate achievement results. In this case, data must be collected or estimated for these categories to calculate the cost impact for the different subgroups, since it is likely that the results will be different for different groups.

A 1999 study from the RAND Center for Research on Immigration Policy employed the three financial analysis tools and created a simulation model to estimate the impact of trends in immigration and student population in California on the quality of the future labor force and on expenditures for public education and other social programs.²⁸ The study focused on three major challenges facing policymakers.

First, the nation's educational institutions must educate an increasingly larger and more diverse population at the same time as public support for education has softened. Second, Hispanics, the fastest growing minority, are significantly lagging other ethnic groups in education attainment, most particularly in college-going and college completion. And third, long-term structural shifts in the U.S.

economy are making education in general, and postsecondary education in particular, necessary for anyone who wants to compete in today's labor market and command a living wage.²⁹

The authors came to several conclusions that speak to concerns about access and equal education opportunity. First, in spite of the rapid growth in the share of minorities in the population, the educational attainment of the adult (25 and over) population will be higher in 2015 than it was in 1990. Second, unless gains are realized in the educational attainment of minorities, the share of college-educated new entrants into the labor market will decrease. Further, without gains in minority educational attainment, the education gap between African-Americans and Hispanics on one side and non-Hispanic whites and Asians on the other will increase. Finally, investing in the cost of closing this education gap will actually pay for itself in terms of savings resulting from decreased public spending on income transfers and social programs, as well as the additional revenue derived from higher incomes and discretionary spending. The RAND study illustrates the power of integrating financial analysis tools and modeling to understand the financial implications of addressing access questions.

Conclusion

After examining the policies and financing strategies used today with accelerated learning options, it is apparent that most states are just beginning to recognize the need for policy support. Typically, across the states, the financing of these four accelerated learning options breaks down into three distinct groups.

- The AP and IB learning options are primarily financed by the combined state and local per-pupil funding. Typically, the state does not provide significant additional funding. States usually provide a state department of education person, often partially funded by federal dollars, to coordinate these options at the state level and distribute federal resources targeted for AP and IB programs to local school districts. The U.S. Department of Education runs an incentive grants program for the states and territories to support the AP and IB learning options, but the amount of money distributed to districts is typically less than \$50 per pupil.
- The Tech-Prep learning option is also primarily financed by a state's combined state and local per-pupil funding. The U.S. Department of Education runs a significant grant program to support Tech-Prep in states and school districts. The majority of federal grant funds pass through

the states to support and supplement local Tech-Prep programming in schools and postsecondary institutions.

- Finally, the dual/concurrent enrollment learning option has significant additional financing components. Like the other options, dual/concurrent enrollment receives a considerable proportion of its funding from combined state and local per-pupil funding. Another significant proportion of its funding comes from the combined state and postsecondary institutional FTE funding. A very limited amount of funding comes directly from federal sources. Because the bulk of dual/concurrent enrollment funding comes from school district per-pupil funding and postsecondary institution FTE funding, both of which are composed of revenue from state, local and other sources, the funding policies associated with this accelerated learning option are the most dynamic. This is likely to continue in the future.

Whether the growth in participation in accelerated learning options will increase significantly or continue at its present rate over the next several years is unknown. For this growth to include increased opportunities for low-income and ethnic minority students, the focused development of state policy and financing will be required. Because most states rely on local initiatives to support these options, a strong relationship exists between the wealth of the community and the strength of the support for these programs. Without changes in state policy and the development of a supportive financing system, these options are unlikely to be equally available to all students.

Policymakers in a handful of states have begun this task. If policymakers in other states are to join these pioneers, they must acquire an understanding of policy and financing options. They then must enact a comprehensive state package to support accelerated learning options. Several key principles should be followed when formulating such a plan:

- Focus policy and financing system development on treating accelerated learning options as a package rather than as independent programs.
- Do not allow competing education systems or competing policy and financing systems to break apart a comprehensive approach to accelerated learning options.
- Build a comprehensive policy and financing system that is responsive to the needs of all students. Work to ensure that the cost of participation does not create barriers for low-income and minority students.

- Build ways to measure effectiveness and cost effectiveness into the comprehensive policy and financing plan.

To develop this type of comprehensive approach to accelerated learning options will require collecting new data, using new analysis tools, and facilitating a new dialogue among state leaders, K-12 school leaders, and postsecondary institution leaders. The new system of financing should be based on the answers to the critical questions raised by stakeholders involved in accelerated learning options. By paying attention to the trends and developments in the costs and benefits associated with accelerated learning, policymakers will be better able to help and encourage participation by students and service-providing organizations.

Endnotes

¹ Clifford Adelman, *Principal Indicators of Student Academic Histories in Postsecondary Education, 1972-2000* (Washington, D.C.: U.S. Department of Education, 2004), 55.

² Tiffany Waits, J. Carl Setzer, and Laurie Lewis, *Dual Credit and Exam-Based Courses in U.S. Public High Schools: 2002-03* (Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 2005), 5.

³ Joseph Nathan, Laura Accomando, and Debra Hare Fitzpatrick, *Stretching Minds and Resources: 20 Years of Post Secondary Enrollment Options in Minnesota* (Minneapolis: University of Minnesota, Hubert H. Humphrey Institute of Public Affairs, December 2005), 20-21.

⁴ Connecticut Board of Governors of Higher Education, *Connecticut High School Students Attending Colleges and Universities* (Hartford: Board of Governors for Higher Education, Department of Higher Education, 2003), 4-5.

⁵ Nancy Hoffman, *Add and Subtract: Dual Enrollment as a State Strategy to Increase Postsecondary Success for Underrepresented Students* (Boston: Jobs for the Future, April 2005), 8.

⁶ Nancy Hoffman and Amy Robins, *Head Start on College: Dual Enrollment Strategies in New England 2004-2005* (Boston: Jobs for the Future, 2005), 13.

⁷ In an effort to open accelerated learning to underserved populations, Early College High Schools - statewide networks that blend high school and college - are targeting students underrepresented in higher education, including those from low-income families, first-generation college goers, English language learners, and students of color; this initiative will serve over 60,000 students at capacity. Jobs for the Future is establishing these Early College High Schools, supported by the Bill & Melinda Gates Foundation and other foundations, in California, Georgia, New York, North Carolina, Ohio, Texas, Utah, and Washington.

⁸ Florida Office of Program Policy Analysis and Government Accountability, "State's High School Acceleration Programs Are Funded through a Variety of Sources" (Tallahassee: Office of Program Policy Analysis and Government Accountability, March 2006), 3.

⁹ Florida Board of Education, *Study on Acceleration Mechanisms in Florida* (Tallahassee: Florida Board of Education, Florida Department of Education, 2003), 33-34.

¹⁰ Pamela Burdman, "The New Advanced Placement Push," *National Crosstalk* (Summer 2000), accessed 1/28/06, from <www.highereducation.org/crosstalk/ct0700/news0700-placement.shtml>.

¹¹ College Board, *Advanced Placement Report to the Nation, 2005* (New York: College Board), accessed 1/26/06, from <www.collegeboard.com/prod_downloads/about/news_info/ap/2005/ap-report-nation.pdf>.

¹² Melinda Mechur Karp, Thomas R. Bailey, Katherine L. Hughes, and Baranda J. Fermin, *Update to State Dual Enrollment Policies: Addressing Access and Quality* (Washington: D.C.: U.S. Department of Education, 2005), 4-7.

¹³ See Chapter 2 in this report.

¹⁴ Florida Board, *Study on Acceleration Mechanisms*, 33-34.

¹⁵ Richard W. Clark, *Dual Credit: A Report of Progress and Policies that Offer High School Students College Credits* (Philadelphia: The Pew Charitable Trusts, 2001), 30-31.

¹⁶ See Debra D. Bragg, EunYoung Kim, and Melanie B. Rubin, *Academic Pathways to College: Policies and Practices of the Fifty States to Reach Underserved Students* (Urbana-Champaign: University of Illinois at Urbana-Champaign, Department of Educational Organization and Leadership, 2005), 32.

¹⁷ In many states, it is difficult to find a state contact with a comprehensive understanding of all four options and a command of the state funding that supports them. For this finance review, personal interviews with state contacts were very helpful. The contacts included the following: Linda Hewitt and Charlene Neel, AP and IB programs, Florida Department of Education; Marlys Peters-Melius, AP and IB programs, and Steve Etheridge, Postsecondary Enrollment Options, Minnesota Department of Education; Ted Summey, CTE Support Services, North Carolina Department of Education; Kristy Ehlers, Gifted and Talented Education, Oklahoma State Department of Education; Dianne Lovett, Advanced Studies, Orange County Public Schools; Kyra Kester, Secondary Education and Career Preparation, Washington Office of the Superintendent of Public Instruction.

¹⁸ *Advanced Placement Report to the Nation 2005*, (New York, NY: The College Board, 2005), 48.

¹⁹ See www.ibo.org/ for more on the IB program and the IB organization.

²⁰ Board Policy, 3.16, Minnesota Board of Trustees - Minnesota State Colleges and Universities.

²¹ For more information on the Advanced Placement Incentive Program, go to <http://title3.sde.state.ok.us/ap/Statutes.htm>.

²² For more information on the Tech-Prep Demonstration Project, go to: www.ed.gov.

²³ For more information on Tech-Prep programs in North Carolina, go to: www.ncpublicschools.org.

²⁴ Robert Palaich, John Augenblick, Samara Foster, Amy Berk Anderson, and Douglas Rose, *Return on Investment in Early College High Schools*, (Boston: Jobs for the Future, forthcoming, June 2006).

²⁵ Leanna Stiefel, Patrice Iatarola, Norm Fruchter, and Robert Berne, *The Effects of Size of Student Body on School Costs and Performance in New York City High Schools* (New York: Institute for Education and Social Policy, New York University, 1998).

²⁶ Nathan, Accomando, and Fitzpatrick, *Stretching Minds*, 29.

²⁷ Washington State Board for Community and Technical Colleges, "Running Start: 2003-04 Annual Progress Report" (Olympia, WA: State Board for Community and Technical Colleges, 2004), 4.

²⁸ Georges Vernes, Richard A. Krop and C. Peter Rydell, *Closing the Education Gap: Benefits and Costs*, (Santa Monica: Center for Research on Immigration Policy, RAND Education, 1999).

²⁹ *Ibid.*, XIX.

Chapter 7

Policy Implications

Cheryl D. Blanco

Accelerated Learning Options: Moving the Needle on Access and Success was designed to inform members of the policy, education, and research communities about existing state and institutional policies and practices associated with four accelerated learning programs. This effort was part of a larger goal of increasing the number of low-income and underrepresented students participating in accelerated learning. The study has sought to present new information: on state policies; institutional policies and practices; student activity, as reflected on high school and college transcripts; student perspectives on these programs; financial approaches; and the literature in general. By reflecting on findings from other recent reports and the research literature, the study has attempted to present a current picture of Advanced Placement (AP), dual/concurrent enrollment, the International Baccalaureate (IB) Diploma Program, and Tech-Prep, including the extent to which they serve underrepresented racial/ethnic minorities and economically disadvantaged students and how effectively they do so.

Early on, this report raised concerns about the lack of adequate information needed to present a robust picture of the four accelerated learning options considered in the study. As individual chapters in the report note, there are a number of areas where significant knowledge gaps exist. Recognizing this weakness in the field, the study sought to add to the information base by conducting original research in areas where there was little or incomplete information. Our institutional survey, transcript analysis, student focus groups, and financing analyses were designed to help bridge the gap in research.

Accelerated learning options are popular and may show promise in important areas, such as improving student preparation for college-level work. Yet there is little in the literature to document the effectiveness of these programs in promoting the broader public policy agenda of enhancing equitable access and success for *all* students. The paucity of information on outcomes and effectiveness is exacerbated by the nature of the programs: many of the benefits from accelerated learning may be difficult to isolate because they are almost certainly related to behavior, attitude, and individual attributes.

Although the evidence supporting the role of accelerated learning in increasing access and success is tenuous and causal relations are uncertain, there are indications that these options are related to

higher rates of college enrollment, persistence, and graduation. This study concludes that recommendations to improve and strengthen selected aspects of the programs will lead to a better understanding of their effectiveness for students and states. Until all states and school districts require a rigorous academic curriculum for all students, accelerated learning options may be the only alternatives that provide more challenging courses and the opportunity to earn college credit while in high school. For these reasons alone, it is imperative that accelerated learning options be universally available and offered at no cost to economically disadvantaged and historically underserved populations.

This final chapter pulls together the findings from the current study with other reports to focus on the implications of several primary issues for public policymakers, educators, and others. The discussion below is arranged by issue topic, although there is much overlap of issues and concerns. Policy recommendations are offered in each area.

Research and Data

While the current study was in progress, new studies and reports were issued that were exceptionally helpful. For example, a report released by the U.S. Department of Education's National Center for Education Statistics (NCES) opened new territory. Designed to provide policymakers, researchers, educators, and administrators with baseline information on the prevalence and characteristics of dual enrollment programs, *Dual Enrollment of High School Students at Postsecondary Institutions: 2002-03* contains unique data on national estimates on dual enrollment programs (programs that let high school students earn college credits for courses taken through a postsecondary institution).¹ Although the NCES report and this study defined the study population somewhat differently, the NCES report provides a critical set of baseline information on the prevalence of college course taking by high school students at sampled institutions during the 2002-03 academic year. Chapter 1 and Appendix A of this study highlight other reports that have made significant contributions to our understanding of accelerated learning policy and practice.

The NCES national data now provide a general picture of selected aspects of some accelerated learning

options, and studies that target specific states begin to give a sense of isolated and individual situations. A significant gap persists, however: we lack a data set that provides state-by-state information in a form that can be monitored and analyzed regularly in a comparative manner for trends, strengths, and weaknesses. Data at this level are central to informing public policy and practice and to leading to improvements. While a number of states gather information on accelerated learning programs, that information is rarely collected and disaggregated in a manner that allows for analysis by income level. Absent that kind of detail, it is impossible to know the extent to which low-income students benefit from these opportunities. Without detailed information on who participates and how they participate, policymakers, educators, and practitioners have no basis for identifying program failings and designing program improvements.

Existing data are often housed in restricted files or buried in obscure sites. A few states now require annual reporting, but these reporting measures generally apply exclusively to one program, most often dual/concurrent enrollment. The most accessible information is on AP examinations taken and scores obtained, which is available from the College Board. When low-income students receive waivers for exam costs, this information helps states track their participation. Another piece of important information that can only be reported by states concerns students who take AP classes and whether they go on to take the AP exam; if collected, these data are incomplete and inconsistent across states.

As important, states and school districts should be able to track students who've taken accelerated learning courses after they finish high school. The transcript analysis conducted for this study provided a rich source of information on such students in one state, including the capacity to compare this group to students who did not take such courses and to examine what happened after they entered a postsecondary institution. For example, Florida high school graduates with accelerated credit through AP, dual/concurrent enrollment, or IB enroll in the state's public four-year institutions immediately after high school graduation at substantially higher rates than students without accelerated credit. The enrollment pattern was different, however, in community colleges: only students with dual/concurrent credit enrolled at a higher rate than students without such credit. Without this specificity, important questions concerning cost effectiveness and student access and success cannot be adequately studied.

To complement state-level assessments of accelerated learning programs, comprehensive, evidence-based research is needed to determine if there is a causal

relationship between participation in accelerated learning courses and access to and success in college among different kinds of students. The research literature is very spotty and provides little insight on the effectiveness of accelerated learning in promoting access and success. Bailey and Karp reviewed 45 reports, articles, and books about transition or accelerated programs. Of these works, all published between 1990 and 2003, only 21 studies reported on student outcomes, and most did not control for student characteristics, student achievement, or student motivation.²

Information from higher education sources is generally no better than that found at the secondary school level. A comment from a Connecticut study is typical of what is happening at the institutional level in the majority of states: "few institutions collect disaggregated data on students participating in institutional programs. In addition, public schools and colleges have not tracked individual students who have earned college credits to see what happened to them after their high school graduations, especially to see if their earned credits are accepted by the colleges and universities in which they enroll."³ An example of one of the few states collecting and publishing information on students' accelerated credits is Ohio. The board of regents recently reported data on the percentage of first-year college students who took either an AP test or college-level courses in high school. In other states, the auditor's office conducts reviews of these programs. The Colorado Office of the State Auditor, for example, published a performance audit in 2001 of postsecondary programs for high school students. The report included a number of findings and recommendations to address concerns with the lack of adequate information on numbers of participants, costs (and alternative methods to reduce the costs), and student completions.⁴

In concluding their study of dual enrollment, Johnstone and Del Genio note: "A sobering conclusion from this research, completed in 2000, is how little scholarship or even thoughtful analysis there has been on what the authors perceive to be an arena of educational practice that is expanding dramatically and that has the potential to link virtually all high schools with all colleges and universities. It is an arena in which state and federal education authorities, individual schools and school districts, and higher educational institutions are already deeply involved in policies and practices, but are too frequently acting both in isolation and in the absence of either clear principles or an appreciation of unintended consequences."⁵ Hoffman and Robins' study of several Northeastern states echo these concerns: "States measure participation in credit hours earned, courses completed, and students or full-time equivalents (FTEs) enrolled. Only a few states disaggregate data by race or calculate growth rates,

and there is little consistency across states in how data is reported.”⁶

Research on accelerated options should be particularly attentive to how patterns of participation and related outcomes differ, based on income or race/ethnicity. The results from the transcript analysis conducted as part of this study concur with other research that shows that accelerated learning options are not equally distributed, with factors like income, race/ethnicity, and even geographic location related to whether accelerated learning options are available to students.⁷ More information is needed to understand whether participation in accelerated learning options helps explain postsecondary access and success, rather than simply being strongly correlated with it.

While this study added descriptive detail to our understanding of how accelerated learning options work, the list of questions for which the education, policy, and research communities need more answers is extensive:

- Is there common language to use in describing different kinds of accelerated options?
- What are the effects of various accelerated options on different kinds of student outcomes?
- How can we quantify the participation of major groups, defined by race/ethnicity, income, gender, and geographic location?
- Given that accelerated credit may help a student in college admissions and that opportunities to participate in accelerated learning options are uneven, are accelerated learning options slowing progress toward educational equity?
- To what extent does participation in accelerated learning options change student behavior concerning enrollment in postsecondary education?
- Is postsecondary persistence to graduation increased and time to degree decreased as a result of participation in accelerated learning options? Do different options produce different levels of persistence and time to degree?
- How do students who've participated in accelerated learning options compare to students without these experiences on access and success measures?
- How can the processes of accepting and applying accelerated credit at postsecondary institutions be made more transparent and simpler for students?
- How can economically disadvantaged students maximize their benefits from financial aid for accelerated options?
- How much money do states invest to finance accelerated learning options? What would a

cost/benefit analysis reveal concerning these investments for the state and the students?

This project supports the position taken by the State Higher Education Executive Officers (SHEEO) and other organizations recommending that the federal government establish a national student unit record data system.⁸ It also endorses the goals of the Data Quality Campaign to establish longitudinal data systems that encompasses all educational levels in all states by 2009. Such efforts should provide the education and policy communities with information related to student participation (or lack of participation) in accelerated learning options.

Recommendations

- A national effort is needed to establish consistency in collecting, analyzing, and reporting data across states on student participation in accelerated learning options. The logical agent to lead this effort is the National Center for Education Statistics.
- Through legislation, lawmakers should require their state departments of education, state higher education executive offices, and postsecondary institutions to collaborate in the design, collection, analysis, and reporting of data that will provide the essential elements to examine student participation in accelerated learning options.
- The research community should collaborate with the federal government, state departments of education, and postsecondary education to design and conduct studies that will provide the evidence-based research needed to help policymakers and others understand the effectiveness of accelerated learning options on access and success for all students.
- Philanthropic organizations, state governments, and the federal government should commit sufficient resources to support a robust and targeted research agenda on accelerated learning options, including longitudinal cohort studies that can track students through secondary school and into higher education and the workforce.

Broadening Participation

The national study conducted by NCES found that approximately 3 million public high school students participated in dual enrollment, AP, and IB courses during the 2002-03 school year (the likelihood of duplicated headcount is high because schools counted students in all such courses, and many enrolled in more than one; it is not possible to calculate a participation

rate).⁹ Other indicators of how widely these options are available are in the NCES report. It appears that opportunity to participate is very dependent on the location or the size of the high school. While the proportion of all public high schools that offered courses for dual credit is high (71 percent), the opportunity to enroll in these courses is greatest for students in large schools and in towns or urban fringe areas.¹⁰ As noted in Chapter 6, schools with the highest minority enrollment are the least likely to offer dual credit courses, compared to schools with lower minority enrollment; schools with higher minority enrollment are more likely to offer AP courses.

A concerted effort is needed at the state and federal level to equalize access to accelerated programs. It is especially critical to ensure that students from economically disadvantaged, historically underrepresented, and rural populations have an equivalent opportunity to benefit, especially in terms of their academic preparation for college and their ability to compete in the admissions process.

The benefits of accelerated learning may differ in important ways, depending on students' income and race/ethnicity. While participation in accelerated learning was clearly related to improved college-going rates and reduced remediation for all students, the transcript analysis also showed that low-income students and minorities with accelerated credit were more likely to enroll at a community college than their peers, who tended to go to a state university. As a result, the gap in the rates at which low-income and middle- to high-income students enrolled at a state university was larger for those with accelerated credit than for those without accelerated credit. Further, students from underrepresented groups who take AP may not perform well enough on the AP examination to earn college credit. More research is needed to understand these different patterns.

The economics of school finance and the realities of state budgets simply do not support a recommendation that all public high schools in the nation should provide equal access to multiple accelerated learning options. Nonetheless, it may be feasible for all schools to offer some type of accelerated learning program. With the widespread availability of technology, it may not be necessary to have an AP, dual/concurrent enrollment, IB, or Tech-Prep teacher in every school. AP courses are readily available online now, and the same is becoming true for dual/concurrent courses. Some states have invested in statewide networks to deliver dual enrollment courses.¹¹ Students can only take advantage of an accelerated program if it is available to them, and increasing access for underrepresented minority and low-income students may only be achieved if their schools are able to provide the same opportunity as

other schools.

Students who participate in accelerated learning have access to enriched and more rigorous coursework, which enhances their chances for success in the workforce and in higher education. Nonetheless, students – often guided by their parents, teachers, counselors, and other school personnel – are frequently reluctant to enroll in accelerated courses for fear of failure or unwillingness to take on harder coursework. To support the inclusion of accelerated learning opportunities in schools for all students and to encourage them to enroll, states and school districts might consider requiring successful completion of at least one accelerated course as a high school graduation requirement. This also has the potential to respond to concerns in states like Colorado, where the Postsecondary Enrollment Options Act was enacted, in part, to stem the high dropout rate among 11th and 12th graders.

Recommendations

- Through legislation, lawmakers should encourage their state department of education, state higher education systems, and individual institutions to collaborate to ensure that students in all high schools in the state have access to at least one of the major accelerated learning options.
- States and local school boards should examine high school graduation requirements to ensure that all students have the option of completing at least one course offered as an accelerated learning option.

Broadening participation in accelerated learning programs also means that students and their families must have clear, timely, and appropriate information about the options. A few states now call on secondary schools and, sometimes, higher education to provide that information, but these cases primarily involve dual/concurrent enrollment. Idaho and Minnesota, for example, require schools or districts to provide counseling services to students and their parents or guardians before students enroll in courses. Additionally, Idaho students and their parents or guardians must sign a form stating that they have received information about a variety of risks and consequences associated with the program; and school districts must provide general information about the program to all 10th and 11th grade students. New Mexico recently adopted a very strong and comprehensive approach to dual enrollment. State law now requires an executed dual credit agreement between the public school district and the postsecondary institution. Components of the agreement include an explanation of how all students and parents will be informed

about dual credit and how students can participate in dual credit; the kinds of counseling provided to help students/parents in deciding about participation in a dual credit program by the high school and the postsecondary institution; and the method to be used by the secondary and postsecondary institution to provide support, such as tutoring, career counseling/guidance, and special services.

To maximize communication efforts, state higher education agencies should join with state departments of education to ensure that information on accelerated options and financial assistance to help pay for them are widely disseminated to students and families from at least 9th grade. The Oklahoma Board of Regents for Higher Education, for example, is involved in advertising concurrent enrollment opportunities to high school students. Campus recruiters can also help encourage students in 10th and 11th grades to utilize accelerated learning programs.

Recommendation

- State law should require that schools ensure that students in grades nine through 12 and their parents have accurate, timely, and appropriate information and counseling on each of the accelerated learning options available through the school. Postsecondary institutions, system offices, and state higher education executive offices should also assist, where appropriate, with dissemination of information on accelerated learning options.

Intensified efforts are needed to engage at-risk students in accelerated learning programs, if access for all students is to be achieved. Opportunities to enroll in accelerated courses are part of the solution; resources to cover the multiple costs are another part. Students from economically disadvantaged families are most vulnerable to being left out of accelerated learning programs if direct costs for tuition, books, transportation, and materials are not covered by the school district, state, or other entity. As reported in Chapter 2, several states use statutory language to protect low-income students from the costs of accelerated learning courses.

Less than half of the postsecondary institutions in our institutional survey reported having an outreach program to serve at-risk students. The NCES study cited in Chapter 3 found only a handful of institutions with dual enrollment programs offering special assistance to students at risk. The policy audit conducted for this study found only two states with legislation addressing special consideration for at-risk students. North Carolina law allows boards of trustees of community colleges and local boards of education to establish

cooperative, innovative programs in high schools and community colleges – programs that will expand students’ opportunities for educational success through high-quality instructional programming. These programs target high school students who are at risk of dropping out of high school and those who would benefit from accelerated academic instruction. Students are eligible for these programs as early as 9th grade. The programs must emphasize parental involvement and provide consistent counseling, advising, and parent conferencing, so that parents and students can make responsible decisions regarding course taking and can track students’ academic progress and success. Oregon law directs school districts to establish a process to ensure that all at-risk students and their parents are notified about the state’s Expanded Options Program and to ensure that providing information to high school students who have dropped out of school is a priority.

Initiatives like those in North Carolina and Oregon can serve as “good practices” for other states to model in developing guidelines that bring at-risk students into accelerated learning programs. Additionally, all states should guarantee students from low-income families that they will not bear any of the cost burden for participating in accelerated learning courses.

Recommendations

- Through legislation, federal and state policymakers should encourage schools and school districts to establish policy and outreach programs that target at-risk students and provide alternatives for them to participate in accelerated learning options.
- The federal government, states, school districts, and postsecondary institutions should assess their financing policies and endorse a funding approach that allows economically disadvantaged students to participate in accelerated learning options at no cost to themselves or their families.

Broadening access also means that states, as well as secondary schools and postsecondary institutions, may need to reexamine their policies regarding participation criteria (the kinds of participation criteria have been documented by the NCES studies on dual enrollment and exam-based programs, as well as by the institutional survey and the policy audit prepared for this study). In most instances, students must meet at least one of these standards: minimum GPA, class standing, recommendation from school personnel and/or parents’ permission, or performance on a standardized test. While these are well-established standards, their efficacy is largely unproven.

These kinds of participation requirements are most common for dual/concurrent enrollment programs: 27 states have adopted state-level policy specifying minimum eligibility requirements. In some cases, statutory language also suggests the type of student who should participate in accelerated learning. Some examples:

- California: “Interested and prepared students.”
- Colorado: “Any student who enrolls in postsecondary courses should be expected to show a high degree of maturity and responsibility.”
- Connecticut: “High school students who demonstrate sufficient scholastic ability.”
- Michigan: “Qualified students.”
- Minnesota: “Mature, academically directed high school students.”
- South Carolina: “Academically talented students.”

Several states, like Idaho, Indiana, Iowa, Kansas, North Dakota, Oklahoma, and West Virginia, refer to “students” generally, with no delimiting language, such as “academically talented.” Arkansas law also exemplifies a more neutral statement: “to provide advanced educational courses that are accessible and that will prepare students for admission to and success in a postsecondary educational environment.”

Participation requirements in any form can be a two-edged sword. On the one hand, they help identify students who have a track record of preparation to succeed in more rigorous coursework. On the other hand, minimum requirements may prevent motivated students from attempting accelerated courses.

Recommendation

- State lawmakers and others, such as local and state boards of education, should examine policies for language that may limit access to, or participation in, accelerated learning options or provide a basis for anyone to discourage students from participating.

Financing and Financial Aid

As Chapter 6 illustrates, the financing of accelerated learning options is a complex issue, with little specific information from states on funding levels, the sources of those dollars, and the distribution among programs or students. Each of these areas of concern needs to be addressed through policy, if states are to have a comprehensive understanding of the effectiveness of their investments in students and in programs that best serve all students.

Funding sources that support accelerated learning programs are a primary area of concern because dollars appear to flow from a number of sources, in irregular patterns, and at varying funding levels. These funding characteristics prompt the question of sustainability: how can we reduce the uncertainty of funding for accelerated learning programs? The financial picture presented in Chapter 6 strongly suggests that AP and Tech-Prep programs are heavily subsidized by the federal government. The risk is high, and the loss may be significant, if these resources dry up. Massachusetts provides an example of that scenario, as well as creative solutions. When the state eliminated funding for dual enrollment programs, the city of Lowell, the University of Massachusetts Lowell, and Middlesex Community College jointly established a funding pool allowing local high school students to take one course at the college free of charge.¹²

National, regional, and local philanthropic organizations also provide funding for students in accelerated learning options. How much money is provided by these groups to assist students in AP, dual/concurrent enrollment, IB, and Tech-Prep is unknown. The potential for philanthropic organizations to influence how accelerated learning can be more effective for all students is significant, given their current commitment to access and success for underserved populations. The absence of reliable data and evidence-based research on program effectiveness not only hinders our ability to understand the impact of these investments within the broader context of state, district, and institutional initiatives, it also may reduce their attractiveness to funders.

When there is little documentation to demonstrate program effectiveness, the reluctance of states and external funding groups to invest in accelerated learning opportunities is understandable. At least on the fiscal level, states should be expected to estimate expenses and determine the cost savings or lack of savings associated with accelerated learning options for students and the state. Few states do this, however, and an important reason why may be the lack of incentive for anyone to take responsibility for this kind of reporting. If school districts or higher education institutions lose money when students take accelerated options, especially dual/concurrent enrollment, there is little motivation to spend more time and money to determine if these options are saving the state money. Additionally, such reporting requires joint tracking of students across education systems - from high school through postsecondary education. In most states, no one agency or office is charged with performing this kind of follow up, with the exception of the auditor's office. States that have established P-20 committees or councils may be best positioned with the kind of

collaborative structure necessary to collect, analyze, and report. In other states, existing statewide articulation committees may fill this role.

Recommendations

- States should identify an agency or office responsible for assessing the cost effectiveness of accelerated learning options for the state and for students and require periodic reporting from that agency.
- States should require annual reporting from their departments of education on how accelerated options are funded, the amount of the investment for each option, the sources of these funds, and the number of students served by each option. This fiscal information should be disaggregated by income level, gender, and race/ethnicity.
- The federal government and states should provide incentive funds to secondary schools and postsecondary institutions to support the greater investment needed to provide underrepresented and economically disadvantaged students with access to accelerated learning options.
- Philanthropic organizations and local communities should commit additional resources to outreach programs and other initiatives that make enrollment in accelerated learning options a recommendation for participation and that include evidence-based research with evaluation components on the efficacy of these initiatives for targeted populations.

The overriding question of how accelerated learning programs are funded has no easy answers, and funding options may need to vary from state to state. Concerns with double funding, for example, should be resolved among policymakers and secondary and postsecondary leaders, taking into account that high schools may be reluctant to encourage students to participate in those options that result in the school losing money. Similarly, postsecondary institutions may withdraw from programs or scale back their participation if they are not adequately compensated for their investment. This study supports the position, advocated by Hoffman and Robins and others, that funding mechanisms should be based on the principle of no cost to economically disadvantaged students and no harm to partnering institutions.¹³

Recommendations

- States should ensure that economically disadvantaged students do not incur expenses for

participation in accelerated learning programs and the associated examinations.

- States should explore funding options that compensate both the public high school and the postsecondary institution, where applicable and necessary, for their costs related to the provision of an accelerated learning course.

Economically disadvantaged students who participate in accelerated learning programs may be supported monetarily in several ways. State and federal funding can support direct program costs; other expenses, such as tuition, fees, books, materials, and transportation, may be underwritten by these funding mechanisms or by external sources. Access to these resources may be the determining factor in making it possible for low-income students to take advantage of accelerated learning courses. Collaboration across education sectors and their communities should provide opportunities to explore creative ways to enhance financial aid for low-income students.

Recommendation

- In addition to gathering data on program funding, states, school districts, and postsecondary institutions should report how the state and students benefit from financial assistance in other forms, including coverage for books, tuition, fees, transportation, etc.

Postsecondary Credit for Accelerated Learning

The institutional survey of policies and practices conducted for this study cited important differences in how colleges and universities handle accelerated credits. The information collected also suggests that there may be key differences between what students *think* will happen to their credit and how institutions actually *treat* that credit once a student is enrolled. Additionally, responses to the survey indicate that responsibility for deciding how accelerated learning credit will be applied is often dispersed among various offices in the institution. This does not appear to be a transparent process for the student, who may have much at stake.

For the protection of students' and states' investments and to take the guesswork out of the use of accelerated learning credits, there should be a guarantee that students who successfully complete accelerated options will be awarded credit at the state's postsecondary institutions. Additionally, it should be clear whether a credit will only apply to general academic requirements

or whether it will also apply toward disciplinary distribution requirements within the institution. This credit should reduce the number of credits that students will be required to take at an institution to obtain a degree. Articulation agreements might provide models for states in this area. For example, some states mandate full articulation of associate of arts' degrees to four-year institutions, and students are guaranteed placement as juniors, with no additional required coursework.

Recommendations

- Through legislation, policymakers should provide assurances that students will receive credit at the state's public two- and four-year postsecondary institutions for each accelerated option that they successfully complete.
- Policy regarding the acceptance and application of accelerated learning credit at the postsecondary institutional level should be transparent to the student and ensure that the student is notified about how the accelerated credit will be applied prior to admission or when an offer of admission is extended.

Collaboration: K-12 and Higher Education

There is much room for expanding higher education's involvement with K-12 in supporting accelerated learning options, particularly on the part of baccalaureate/master's and research institutions. This study found that dual/concurrent enrollment courses are far more prevalent in community colleges than in either research/doctoral or baccalaureate/master's institutions. This is consistent with results of the NCES survey, which reported that 98 percent of public two-year institutions had high school students taking courses for college credit during the 2002-03 academic year, compared to 77 percent of public four-year institutions and 40 percent of private four-year institutions.¹⁴

For one accelerated option - dual enrollment programs - the American Association of State Colleges and Universities (AASCU) exhorts its institutions to take a leadership role: "As regional institutions, they are able to assess regional and community needs and design programs to meet those needs. Such programs can generate revenue and increase enrollments, as students who start a degree at an institution may be more likely to complete the degree at that institution. Finally, and perhaps most importantly, dual enrollment provides an opportunity to smooth the transition to postsecondary education."¹⁵

An important disconnect in the transition from high school to college relates to the assessment of student readiness for college-level work. This is an area where stronger linkages between K-12 and higher education at the local level - as well as among state-level policymaking bodies, such as state higher education executive offices, higher education system offices, chief state school officers, and state boards of education - can produce important breakthroughs in more effective co-use of assessment tests as students leave high school and enter higher education.

Another area where stronger collaboration between K-12 and higher education is essential relates to the quality of accelerated learning options. Quality issues have been raised in relation to several aspects of some accelerated learning options, but the major interest areas have been the curriculum, teaching faculty, materials, assessments, and students. Most of the concerns with quality have been associated with dual/concurrent enrollment. However, questions have also emerged regarding the level of curricular and instructional quality in AP courses. Few states require any form of quality control, such as annual reporting on student outcomes or specification who can teach courses. This absence of state policy provides ample flexibility to institutions but may, as Bailey and Karp mention, "create uneven program structures and quality across the state."¹⁶

Recommendation

- State boards of education and state higher education executive offices should jointly develop, implement, and monitor statewide guidelines that address quality issues associated with accelerated learning options, including guidelines and benchmarks for performance expectations concerning the curriculum, faculty, materials, and assessments.

Concluding Observations

Accelerated learning options are growing in number, diverse in nature, and widely - but unevenly - dispersed across the nation's schools. The four accelerated learning options included in this study - Advanced Placement, dual/concurrent enrollment, the International Baccalaureate program, and Tech-Prep - represent a few of the many alternative transition programs that may award college credit to students while they are still in high school. They appear to offer multiple advantages for a range of interests. For some students, these programs provide greater academic rigor; for others, they offer access to a

college environment while they are still in high school. For yet others, the credits awarded by accelerated learning may translate into savings on college costs. **But students are not the only potential beneficiaries.** States may see their students leaving high school better prepared, and postsecondary institutions may take advantage of recruiting opportunities with students in accelerated programs.

Although accelerated learning programs are increasingly popular, there is very limited evidence-based research to demonstrate their effectiveness in improving access and success for students, particularly those who are economically disadvantaged or are racial/ethnic minorities. Additionally, little information is available to document that these programs are cost effective for states or students.

Accelerated Learning Options: Moving the Needle on Access and Success explores issues of effectiveness and availability by reviewing the status of the literature and by examining new information generated through this study's 50-state policy audit; survey of postsecondary institutions on their policies and practices; analysis of student transcripts; interviews with students, counselors, and teachers; and analysis of financing approaches. The recommendations that emerged from this study are intended to draw attention to compelling and unresolved issues related to the offering of accelerated learning options and to encourage policymakers, researchers, practitioners, and external funding groups to work together on efforts to ensure that *all* students enjoy the advantages offered by accelerated learning programs and courses.

Endnotes

- ¹ Brian Kleiner and Laurie Lewis, *Dual Enrollment of High School Students at Postsecondary Institutions: 2002-03* (Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 2005), 4.
- ² Thomas Bailey and Melinda Mechur Karp, *Promoting College Access and Success: A Review of Credit-Based Transition Programs* (Washington, D.C.: Office of Vocational and Adult Education, U.S. Department of Education, November 2003), 15.
- ³ Connecticut Board of Governors of Higher Education, "Connecticut High School Students Attending Colleges and Universities" (Hartford: Board of Governors for Higher Education, Department of Higher Education, 2003), 11.
- ⁴ Colorado State Auditor, "Postsecondary Programs for High School Students" (Denver: State of Colorado, Report of the State Auditor, June 2001), 2.
- ⁵ Bruce D. Johnstone and Beth Del Genio, *College-Level Learning in High School: Purposes, Policies, and Practical Implications* (Buffalo: Learning Productivity Network, University at Buffalo, Graduate School of Education, August 2000), 42-43.
- ⁶ Nancy Hoffman and Amy Robins, "Head Start on College: Dual Enrollment Strategies in New England 2004-2005" (Boston: Jobs for the Future, 2005), 7.
- ⁷ See the work (cited in References at the end of this study) of Tiffany Waits, J. Carl Setzer, and Laurie Lewis (2005); Florida Board of Education and Florida Department of Education (December 2003); and the College Board's "Advanced Placement Report to the Nation: 2006."
- ⁸ State Higher Education Executive Officers, "Accountability for Better Results: A National Imperative for Higher Education" (Boulder, CO: State Higher Education Executive Officers, March 2005), 8.
- ⁹ Tiffany Waits, J. Carl Setzer, and Laurie Lewis, *Dual Credit and Exam-Based Courses in U.S. Public High Schools: 2002-03* (Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 2005), 4.
- ¹⁰ *Ibid.*, 4.
- ¹¹ Kathleen W. Marcel, "Using Technology to Increase Access to Accelerated Learning Opportunities in Four States" (Boulder, CO: Western Interstate Commission for Higher Education, 2004).
- ¹² Hoffman and Robins, "Head Start," 12.
- ¹³ *Ibid.*, 7.
- ¹⁴ Kleiner and Lewis, *Dual Enrollment*, 5.
- ¹⁵ "The Open Door: Assessing the Promise and Problems of Dual Enrollment," state policy briefing (Washington, D.C.: American Association of State Colleges and Universities, May 2002), 1.
- ¹⁶ Bailey and Karp, *Promoting College*, 11.

Author Biographies

Amy Berk Anderson is a senior associate with Augenblick, Palaich and Associates (APA), a Denver-based education consulting firm specializing in school finance, school reform, and education policy. Most of her work over the past 15 years has focused on efforts to increase choice and opportunity within the public schools via new types of governance structures (e.g., charter schools) and innovative approaches to educational delivery (e.g., virtual schools, school reform models). Berk Anderson worked previously with Augenblick & Myers (predecessor to APA), from 1996-1999. In addition to working with APA, she has worked as an independent consultant and was director of new school development for the Colorado League of Charter Schools. Anderson holds a Ph.D. in educational leadership and innovation from the University of Colorado.

Cheryl Blanco is senior program director for policy analysis and research at the Western Interstate Commission on Higher Education (WICHE). She monitors historical and emerging social, economic, and political trends that impact higher education; directs the work of several policy projects; and produces a variety of publications to improve policymaking in higher education. She was appointed by former Secretary of Education Richard Riley to the Advisory Council on Education Statistics for the National Center for Education Statistics and is a past chair of the National Postsecondary Education Cooperative. Prior to joining the WICHE staff, Blanco was the educational policy director at the Florida Postsecondary Education Planning Commission. She has held positions at Arecibo Technological University College, University of Puerto Rico, including assistant to the vice president for academic affairs, director of the division of continuing education, coordinator for professional development, and tenured associate professor in the English Department. She received her Ph.D. in higher education from Florida State University.

Steve Farkas is principal of Farkas Duffett Research Group (FDR Group), a consulting company that uses the tools of public opinion research to help foundations and other nonprofits succeed with programmatic initiatives and reform efforts. Prior to cofounding the FDR Group, he was research director at Public Agenda, a nonprofit and nonpartisan think tank, from 1992 to 2004 (he continues his affiliation with Public Agenda as a senior research fellow). He began his career with a short stint

as a senior research analyst at Penn + Schoen in 1990. Farkas is the principal author of over 100 major opinion studies on public education, families, poverty and immigration, social security, crime, and foreign policy. His expertise lies in crafting original questionnaires, employing advanced statistical techniques, and moderating focus groups; in the area of education, he has conducted over 150 focus group discussions with teachers, students, parents, and administrators. He has appeared on CNN, CBS, and ABC and has been featured on NPR. He earned his B.A. from New York University and his M.A. and M. Phil. from Columbia University's Department of Political Science. At Columbia, he received a MacArthur Pre-Dissertation Fellowship; he is currently writing his dissertation on religious faith and tolerance. In 2004-2005 he was a program associate at the National Center for Public Policy and Higher Education.

John Immerwahr is associate vice president for academic affairs at Villanova University and a senior research fellow for Public Agenda. He has authored and coauthored a number of Public Agenda reports on education, including: *With Diploma in Hand: Hispanic High School Seniors Talk about their Future*; *Great Expectations: How the Public and Parents View Higher Education*; and *Doing Comparatively Well: Why the Public Loves Higher Education and Criticizes K-12*. He serves on the National Advisory Board of the National Survey of Student Engagement. His B.A. is from Princeton University, and his Ph.D. is from the University of Michigan's Department of Philosophy.

Demarée K. Michelau is a project coordinator for Policy Analysis and Research at the Western Interstate Commission for Higher Education (WICHE). As part of her work at WICHE, she has primary responsibility for conducting the state and institutional policy audits and analyses and overseeing the updating of SPIDO (State Policy Issues Database Online). The author of numerous education reports and magazine articles, she has experience in K-12 and higher education policy, including college affordability and access, accelerated learning options, K-16 reform, postsecondary remedial education, and affirmative action. Previously, she worked for the National Conference of State Legislatures as a policy specialist. Michelau received her bachelor's degree in public law from Northern Illinois University in 1994 and her master's degree in political science from the University of Colorado at

Boulder in 1996. She is currently working toward her Ph.D. in political science at the University of Colorado at Boulder.

John L. Myers has been an educational consultant since 1993. He is currently vice president of Augenblick, Paliach and Associates (APA), a firm specializing in education finance policy, as well as the owner of the JL Myers Group, a consulting firm. From 1993 to 2003 Myers was a partner in Augenblick & Myers, the predecessor to APA. Prior to this he served as the education program director for the National Conference of State Legislatures for six years; as executive assistant to the governor of Kansas; and as a member of the Kansas House of Representatives for six years. Myers has also worked as a newspaper reporter, a Boy Scout executive, and a community education coordinator; he was the founding codirector of the National Association of Charter School Authorizers, as well as the director of the Colorado School Finance Project. He has worked as a state policy advisor for the National Board for Professional Teaching Standards since 1997.

Robert Palaich is the vice president of Augenblick, Palaich and Associates (APA), a Denver-based education consulting firm. He joined the firm in 2003. Prior to joining APA, he was the vice president of the policy studies and programs division at the Education Commission of the States (ECS); previous to taking this post, he directed ECS's constituent services unit. During the past several years, Palaich has worked with state leaders in Hawaii, Kentucky, Connecticut, Indiana, South Carolina, New Mexico, and California to undertake comprehensive reviews of their education systems. He has also worked with state policymakers on questions of comprehensive school reform, at-risk youth, teacher policy, school restructuring, and school finance issues. He has written articles on education reform, at-risk youth, teacher policy, school finance, local district spending patterns, tax and expenditure limitations, state legislatures, and state teacher policy.

Brian T. Prescott, a research associate with the Policy Analysis and Research unit of the Western Interstate Commission for Higher Education (WICHE) provides expertise in all data collection, usage, and analysis in the unit. He is responsible for updating the online version of the Regional Fact Book for Higher Education in the West, a series of policy indicators, and for the annual updates of Tuition and Fees in Public Higher Education in the West. Prescott has also worked in state governmental relations at the University of

Virginia, where he completed his Ph.D. in higher education.

Colleen O. Sathre, vice president emeritus of the University of Hawaii, served as the chief academic planning officer for the University of Hawaii system. For more than 25 years she prepared analytical studies and managed efforts that produced university mission statements; system and campus strategic plans; systemwide tuition schedules; university centers on neighbor islands; benchmarks/performance indicators linked to planning goals; the reorganization of the university's information technology and computing resources; and numerous board and executive policies. Sathre holds a B.A. in history from the College of St. Benedict and an M.A. and Ph.D. in political science from the the University of Minnesota. She is currently engaged in writing and consulting and resides in Honolulu.

Jennifer Sharp Silverstein is currently working on her Ph.D. in research and evaluation methodologies and educational foundations and public policy at the University of Colorado at Boulder. Prior to becoming a full-time student Silverstein was a school finance policy analyst and a 7th grade public school teacher. She received her master's degree in public policy from the University of Wisconsin at Madison. Silverstein is currently working for school districts in Colorado, evaluating teacher compensation programs, analyzing achievement gap data, looking at efficiency issues, and conducting evaluations of school programs, such as summer school.

References

- Academic Pathways to Access and Student Success (APASS), accessed 1/28/06 from <www.apass.uiuc.edu>.
- Access Denied: Restoring the Nation's Commitment to Equal Educational Opportunity*. Washington, D.C.: Advisory Committee on Student Financial Assistance, 2001.
- Accountability for Better Results - A National Imperative for Higher Education*. Boulder, CO: State Higher Education Executive Officers, 2005.
- Achieve and National Governors Association. *An Action Agenda for Improving America's High Schools*. Washington, D.C.: Achieve, Inc., and National Governors Association, 2005.
- Adelman, Clifford. *Answers in the Tool Box: Academic Intensity, Attendance Patterns, and Bachelor's Degree Attainment*. Washington, D.C.: U.S. Department of Education, 1999.
- Adelman, Clifford. *Principal Indicators of Student Academic Histories in Postsecondary Education, 1972-2000*. Washington, D.C.: U.S. Department of Education, 2004.
- Adelman, Clifford. *The Toolbox Revisited: Paths to Degree Completion from High School through College*. Washington, D.C.: U.S. Department of Education, 2006.
- American Association of State Colleges and Universities. "The Open Door ... Assessing the Promise and Problems of Dual Enrollment." State Policy Briefing. Washington, D.C.: American Association of State Colleges and Universities, 2002.
- Andrews, Hans A. "Lessons Learned from Current State and National Dual-Credit Programs." *New Directions for Community Colleges* 111 (2000): 31-39.
- Bailey, Thomas, Katherine L. Hughes, and Melinda Mechur Karp. *What Role Can Dual Enrollment Play in Easing the Transition Between High School and Postsecondary Education?* Washington, D.C.: Office of Vocational and Adult Education, U.S. Department of Education, April 2002.
- Bailey, Thomas, and Melinda Mechur Karp. *Promoting College Access and Success: A Review of Credit-Based Transition Programs*. Washington, D.C.: Office of Vocational and Adult Education, U.S. Department of Education, November 2003.
- Benally, Suzanne. *Serving American Indian Students: Participation in Accelerated Learning Opportunities*. Boulder, CO: Western Interstate Commission for Higher Education, April 2004.
- Bergeson, John B. "An Unanswered Question about the Advanced Placement Program: Do Examination Questions Predict Grades?" *The Journal of Higher Education* 39, no. 2 (February 1968): 101-104.
- Blagaich, Pete. "Advanced Placement Courses Are Not for Everyone." *The History Teacher* 32, no.2 (February 1999): 259-262.
- Boswell, Katherine. "State Policy and Postsecondary Enrollment Options: Creating Seamless Systems." *New Directions for Community Colleges* 113 (2001): 7-14.
- Bragg, Debra D. "Maximizing the Benefits of Tech-Prep Initiatives for High School Students." *New Directions for Community Colleges* 111 (2000): 23-30.
- Bragg, Debra. "Promising Outcomes for Tech Prep Participants in Eight Local Consortia: A Summary of Initial Results." St. Paul, MN: National Research Center for Career and Technical Education, 2001. ERIC Document ED 453 363.
- Bragg, Debra D., Eunyoung Kim, and Melanie B. Rubin. "Academic Pathways to College: Policies and Practices of the Fifty States to Reach Underserved Students." Paper presented at the annual meeting of the Association for the Study of Higher Education, Philadelphia, November 19, 2005.
- Briley, Ron. "What Do You Mean You Don't Do Advanced Placement? Confessions of an Educational Heretic." *The History Teacher* 33, no. 4 (August 2000): 527-532.
- Burdman, Pamela. "The New Advanced Placement Push." *National Crosstalk* (Summer 2000), accessed 1/26/06 from <www.highereducation.org/crosstalk/ct0700/news0700-placement.shtml>.
- Burton, Nancy W., Nancy Burgess Whitman, Mario Yepes-Baraya, Frederick Cline, and R. Myung-in Kim. *Minority Student Success: The Role of Teachers in Advanced Placement Courses*. New York: The College Entrance Examination Board, January 2002.
- Cambra, Ronald E. *A Survey of Dual Enrollment Practices in Higher Education in the United States*. Seattle: Institute for Educational Inquiry, October 2000.
- Catron, Rhonda K. "Dual Enrollment in Virginia." *New Directions for Community Colleges* 113 (2001): 51-58.
- Chapman, Brian G. "A Model for Implementing a Concurrent Enrollment Program." *New Directions for Community Colleges* 113 (2001): 15-22.
- Chapman, Gloria Ortner. "Results of Advanced Placement." *The Journal of Higher Education* 33, no. 7 (October 1962): 397-398.

Clark, Richard W. *Dual Credit: A Report of Progress and Policies that Offer High School Students College Credits*. Philadelphia: The Pew Charitable Trusts, 2001.

College Board. "AP Summary Reports: 2004," accessed 10/25/04 from <http://www.collegeboard.com/student/testing/ap/exgrd_sum/2004.html>.

College Board. *Advanced Placement Report to the Nation, 2005*. New York: College Board, 2005, accessed 1/26/06 from <www.collegeboard.com/prod_downloads/about/news_info/ap/2005/ap-report-nation.pdf>.

College Board Advanced Placement credit policy information, accessed 1/8/05 from <<http://apps.collegeboard.com/apcreditpolicy/index.jsp>>.

College Composition and Communication. "Implications of the Advanced Placement Programs." *College Composition and Communication* 10, no. 3 (October 1959): 134-136.

Colorado Office of the State Auditor. "Postsecondary Programs for High School Students: Performance Audit" (June 2001), accessed 1/5/06 from <[http://www.leg.state.co.us/OSA/coauditor1.nsf/All/CEE288A917503B4287256E74006963DD/\\$FILE/1336PostSecondaryPerFY01.pdf](http://www.leg.state.co.us/OSA/coauditor1.nsf/All/CEE288A917503B4287256E74006963DD/$FILE/1336PostSecondaryPerFY01.pdf)>.

Connecticut Board of Governors for Higher Education. *Connecticut High School Students Attending Colleges and Universities*. Hartford: Board of Governors for Higher Education, Department of Higher Education, 2003.

Cusker, Elaine. *A Study of the Use of Advanced Placement Credit by Undergraduates Entering Binghamton University in 1990*. Ph.D. dissertation, State University of New York at Buffalo, Department of Educational Leadership and Policy, 1999.

Dougan, Carol P. "The Pitfalls of College Courses for High-School Students." *The Chronicle of Higher Education* (October 28, 2005).

Education Commission of the States. *Advanced Placement Courses and Examinations: State-Level Policies*. Denver: Education Commission of the States, January 2000.

Education Commission of the States. *Postsecondary Options: Dual/Concurrent Enrollment*. Denver: Education Commission of the States, July 2001.

Education Commission of the States. *The Progress of Education Reform 2005: Dual Enrollment*. Denver: Education Commission of the States, July 2001, vol. 6, no. 3.

Florida Board of Education. *Study on Acceleration Mechanisms in Florida*. Tallahassee: Florida Board of Education, Florida Department of Education, 2003,

accessed 1/19/06 from <http://www.firn.edu/doe/postsecondary/pdf/acc_accelerationstudy_1203.pdf>, 9-16.

Frazier, Calvin M. *Dual Enrollment: A Fifty-State Overview (Dual Credit Study Technical Report #2)*. Seattle: Institute for Educational Inquiry, October 2000.

Geiser, Saul, and Veronica Santelices. "The Role of Advanced Placement and Honors Courses in College Admissions." Berkeley, CA: Center for Studies in Higher Education, 2004, accessed 10/13/05 from <http://repositories.cdlib.org/cshe/CSHE-4-04>.

Godsey, Maurice. "International Baccalaureate History of the Americas: A Comparative Approach." *The History Teacher* 23, no. 4 (August 1990): 383-394.

Gomez, Gigi. "Sources and Information: Creating Effective Collaboration between High Schools and Community Colleges." *New Directions for Community Colleges* 113 (2001): 81-86.

Gonzalez, Eugenio J., Kathleen M. O'Connor, and Julie A. Miles. *How Well Do Advanced Placement Students Perform on the TIMSS Advanced Mathematics and Physics Tests?* Boston: The International Study Center, Lynch School of Education, 2001.

Harvey, William B., and Eugene L. Anderson. *Minorities in Higher Education: Twenty-First Annual Status Report, 2003-2004*. Washington, D.C.: American Council on Education, 2005.

Hedrick, James A. "College Credit by Examination." *The Journal of Higher Education* 31, no. 4 (April 1960): 212-215.

Helfgot, Steven R. "Concurrent Enrollment and More: Elements of a Successful Partnership." *New Directions for Community Colleges* 113 (2001): 43-49.

Hoffman, Nancy. "College Credit in High School: Increasing College Attainment Rates for Underrepresented Students." *Change* (July/August 2003): 43-48.

Hoffman, Nancy. *Add and Subtract: Dual Enrollment as a State Strategy to Increase Postsecondary Success for Underrepresented Students*. Boston: Jobs for the Future, April 2005.

Hoffman, Nancy, and Amy Robins. *Head Start on College: Dual Enrollment Strategies in New England 2004-2005*. Boston: Jobs for the Future, June 2005.

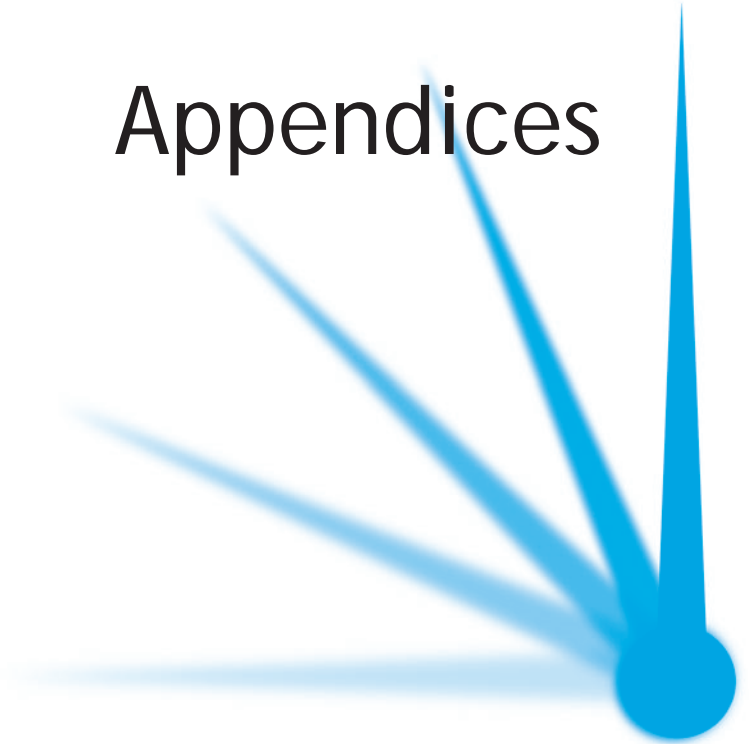
Hughes, Katherine L., Melinda Mechur Karp, Baranda J. Fermin, and Thomas R. Bailey. *Pathways to College Access and Success*. Washington, D.C.: U.S. Department of Education, Office of Vocational and Adult Education, 2005.

Hugo, Ester B. "Dual Enrollment for Underrepresented Student Populations." *New Directions for Community Colleges* 113 (2001): 67-72.

- Johnstone, Bruce D., and Beth Del Genio. *College-Level Learning in High School: Purposes, Policies, and Practical Implications*. Buffalo, NY: Learning Productivity Network, University at Buffalo, Graduate School of Education, 2000.
- Jordan, Tammi C. "Dual Enrollment Options: Columbus State Community College Model for Successful Implementation." *New Directions for Community Colleges* 113 (2001): 73-80.
- The Journal of Blacks in Higher Education*. "College-Bound Black Students Are Slowly Advancing in Advanced Placement Tests." *The Journal of Blacks in Higher Education* 19 (Spring 1996): 6-9.
- The Journal of Blacks in Higher Education*. "College-Bound Black Students Are Making Gradual Inroads in Advanced Placement Tests." *The Journal of Blacks in Higher Education* 19 (Spring 1998): 60-64.
- Karp, Melinda Mechur, Thomas R. Bailey, Katherine L. Hughes, and Baranda J. Fermin. *Update to State Dual Enrollment Policies: Addressing Access and Quality*. Washington: D.C.: U.S. Department of Education, 2005.
- Kirst, Michael, and Kathy Bracco. "Bridging the Great Divide: How the K-12 and Postsecondary Split Hurts Students, and What Can Be Done About It." In *From High School to College*, edited by Michael Kirst and Andrea Venezia. San Francisco: Jossey-Bass, 2004.
- Klee, Carol A., and Elizabeth S. Rogers. "Status of Articulation: Placement, Advanced Placement Credit, and Course Options." *Hispania* 72, no. 3 (September 1989): 763-773.
- Kleiner, Brian, and Laurie Lewis. *Dual Enrollment of High School Students at Postsecondary Institutions: 2002-03*. Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 2005.
- Klopfenstein, Kristin. "Advanced Placement: Do Minorities Have Equal Opportunity?" *Economics of Education Review* 23 (2004): 115-131.
- Klopfenstein, Kristin, and M. Kathleen Thomas. *The Advanced Placement Performance Advantage: Fact or Fiction?* Dallas: Texas Schools Project, 2005, accessed 10/13/05 from <<http://www.utdallas.edu/research/tsp/Index.htm>>.
- Klopfenstein, Kristin, and M. Kathleen Thomas. "The Link between Advanced Placement Experience and College Success." Dallas: Texas Schools Project, 2005, accessed 10/13/05 from <<http://www.utdallas.edu/research/tsp/pdfpapers/newpaper1b.pdf>>.
- Knopp, Linda. "Remedial Education: An Undergraduate Student Profile." *American Council on Education Research Brief* 6, no. 8. Washington, D.C.: American Council on Education, 1995.
- Marcel, Kathleen. *Online Advanced Placement Courses: Experiences of Rural and Low-Income High School Students*. Boulder, CO: Western Interstate Commission for Higher Education, March 2003.
- Marcel, Kathleen. *Using Technology to Increase Access to Accelerated Learning Opportunities in Four States*. Boulder, CO: Western Interstate Commission for Higher Education, December 2004.
- Martinez, Monica, and Shayna Klopott. *The Link between High School Reform and College Access and Success for Low-Income and Minority Youth*. Washington, D.C.: American Youth Policy Forum and Pathways to College Network, 2005.
- McMannon, Timothy J. *Dual Credit: A Review of the Literature (Dual Credit Study Technical Report #1)*. Seattle: Institute for Educational Inquiry, October 2000.
- Michelau, Demarée. "Postsecondary Enrollment Options Programs." *NCSL State Legislative Report*. Denver: National Conference of State Legislatures, 2001.
- Milewski, Glenn B., and Jacqueline M. Gillie. *What Are the Characteristics of AP Teachers? An Examination of Survey Research*. New York: The College Entrance Examination Board, 2002.
- Minnesota Office of Internal Auditing, Minnesota State Colleges and Universities. "Post-Secondary Enrollment Options Program" (July 17, 2001), accessed 1/5/06 from <http://www.mnscu.edu/media/publications/pdf/pseo_audit_rpt2001.pdf>.
- Morgan, Rick, and Len Ramist. *Advanced Placement Students in College: An Investigation of Course Grades at 21 Colleges*. Princeton, NJ: Educational Testing Service, February 1998.
- Nathan, Joseph. "More High School Options, Better Information." In *Double the Numbers: Increasing Postsecondary Credentials for Underrepresented Youth*, edited by Richard Karzis, Joel Vargas, and Nancy Hoffman. Cambridge, MA: Harvard Education Press, 2004: 76-77.
- Nathan, Joseph, Laura Accomando, and Debra Hare Fitzpatrick. "Stretching Minds and Resources: 20 Years of Post Secondary Enrollment Options in Minnesota." Minneapolis: University of Minnesota, Hubert H. Humphrey Institute of Public Affairs (December 2005): 29.
- National Center for Public Policy and Higher Education. "Measuring Up 2004," accessed 12/1/05 from <<http://measuringup.highereducation.org/default.cfm>>.
- National Commission on Accountability in Higher Education. *Accountability for Better Results: A National Imperative for Higher Education*. Denver: State Higher Education Executive Officers, March 2005.

- Pennington, Hilary. "Accelerated Advancement in School and Work." *Brookings Papers on Education Policy*: 2003: 339-363.
- Peter, Katharin, Emily Forrest Cataldi, and C. Dennis Carroll. *The Road Less Traveled? Students Who Enroll in Multiple Institutions*. Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 2005.
- Peterson, Margaret K., John Anjewierden, and Cris Corser. "Designing an Effective Concurrent Enrollment Program: A Focus on Quality of Instruction and Student Outcomes." *New Directions for Community Colleges* 113 (2001): 23-31.
- Puyear, Donald E., Linda M. Thor, and Karen L. Mills. "Concurrent Enrollment in Arizona: Encouraging Success in High School." *New Directions for Community Colleges* 113 (2001): 33-41.
- Reisberg, Leo. "Some Professors Question Programs That Allow High-School Students to Earn College Credits." *The Chronicle of Higher Education* (June 26, 1998).
- Rothschild, Eric. "Four Decades of the Advanced Placement Program." *The History Teacher* 32, no.2 (February 1999): 175-206.
- Rouse, C.E. "What To Do After High School? The Two-Year vs. Four-Year College Enrollment Decision," in R. Ehrenberg (ed.), *Contemporary Policy Issues in Education* (Ithaca, NY: ILR Press, 1994), 59-88.
- Sauer, Edwin. "The Advanced Placement Program. Advantages and Cautions." *College Composition and Communication* 11, no. 1 (February 1960): 7-12.
- Smith, Starita. "Utah Questions Dual Enrollment." *Community College Week* (August 23, 1999).
- Soder, Roger. *Dual Credit Programs in the National Network for Educational Renewal: A Summary of Findings* (Dual Credit Study Technical Report #4). Seattle: Institute for Educational Inquiry, October 2000.
- Solorzano, Daniel G., and Armida Ornelas. "A Critical Race Analysis of Advanced Placement Classes: A Case of Education Inequality." *Journal of Latinos and Education* 1, no. 4 (2002): 215-229.
- Southern Regional Education Board (SREB), *They Came to College? A Remedial/Developmental Profile of First-Time Freshmen in SREB States* (Atlanta: SREB, 1991).
- Southern Regional Education Board. *High School to College and Careers: Aligning State Policies*. Atlanta: Southern Regional Education Board, 2002.
- Southern Regional Education Board. *Progress in Advanced Placement and International Baccalaureate in SREB States*. Atlanta: Southern Regional Education Board, 2003.
- Stiefel, Leanna, Patrice Iatarola, Norm Fruchter, and Robert Berne. *The Effects of Size of Student Body on School Costs and Performance in New York City High Schools*. New York: Institute for Education and Social Policy, New York University, 1998.
- U.S. Department of Education, Office of Vocational and Adult Education, accessed 1/30/06 from <<http://www.ed.gov/about/offices/list/ovae/pi/cclo/cbtrans/index.html>>.
- Venezia, Andrea, Patrick M. Callan, Joni E. Finney, Michael W. Kirst, and Michael D. Usdan. *The Governance Divide: A Report on a Four-State Study on Improving College Readiness and Success*. San Jose, CA: The National Center for Public Policy and Higher Education, 2005.
- Waits, Tiffany, Carl J. Setzer, and Laurie Lewis. *Dual Credit and Exam-Based Courses in U.S. Public High Schools: 2002-03*. Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 2005.
- Washington State Board for Community and Technical Colleges. "Running Start: 2003-04 Annual Progress Report." Olympia, WA: State Board for Community and Technical Colleges (2004): 4-5.
- Western Interstate Commission for Higher Education. *Knocking at the College Door: Projections of High School Graduates by State, Income, and Race/Ethnicity*. Boulder, CO: Western Interstate Commission for Higher Education, 2003.
- Wilcox, Edward T. "Administrative Problems Posed by the Advanced Placement Program." *College Composition and Communication* 10, no. 1 (February 1959): 14-18.
- Windham, Patricia. *High School and Community College Dual Enrollment: Issues of Rigor and Transferability*. Tallahassee: Florida State Board of Community Colleges, 1997.
- Yonezawa, Susan, Amy Stuart Wells, and Irene Serna. "Choosing Tracks: 'Freedom of Choice' in Detracking Schools." *American Educational Research Journal* 39, no. 1 (2002): 37-67.

Appendices



Appendix A

A Review of the Literature

Demarée K. Michelau

Introduction

This review examines the current literature to inform policymakers and educational leaders about potential gaps or disconnects between research and policy, specifically those related to the College Board's Advanced Placement (AP) Program, dual/concurrent enrollment, the International Baccalaureate (IB) Diploma Program, and Tech-Prep. It also describes the historical perspective related to accelerated learning, and demonstrates how the research and policy communities have dealt with these issues.

This review is not limited to work found in peer-reviewed, scholarly journals and books. Due to this report's focus on policy and practice, it was important to include a body of literature that comes from national and regional policy organizations, foundations, and other sources. Thus, this synthesis is the result of comprehensive searches of j-stor, Google Scholar, and similar search engines; explorations of websites of national and regional policy organizations; reviews of reference lists from various works; and the use of informal networks of professional contacts. All of the cited publications can be found in the references section of this report.

This review is organized according to the five primary research areas of this report: state policy; institutional policy and practice; student participation, persistence, and completion; student perspectives; and finance.

General Context

Research on accelerated learning is a developing and promising field and one ripe for additional work. Compared to other areas in education, there is not a great deal of research, but in recent years, there has been significant growth in the number of publications. The overwhelming amount of new information in the literature targets AP and dual/concurrent enrollment, as opposed to IB and Tech-Prep.

Most literature that relates to accelerated learning was published either in the late 1950s and 1960s or after 2000. There are few reviews of the relevant literature, and those that exist tend to focus on only one type of accelerated learning program. For example, McMannon (2000) provides information about the roots of the dual credit initiative and offers insights into the benefits of and problems with such programs. Similarly, Gomez

(2001) concentrates on dual/concurrent enrollment programs and offers an annotated bibliography.

The majority of the work related to accelerated learning falls into the category of *research* reported in articles in peer-reviewed journals. Of the publications considered to be scholarly in nature, the majority are on AP, with a few on other accelerated learning opportunities. The most obvious gap is in research on the effects of these programs on low-income students' academic success over time. This gap is due to the fact that most states do not track the data in a way that makes such studies possible, which limits researchers' ability to answer important questions. Although the College Board collects and provides data on the number of students taking AP examinations and the number of examinations taken, it does not collect data on AP courses offered or taken in the states. Further, data on dual/concurrent enrollment, if collected systematically, is done so at the state level, but making reliable comparisons across states is problematic.

A second area within the literature that is highlighted in this review falls into the category of *policy*. Most policy publications are products of major policy organizations and funded by foundations or governmental entities. Policy publications that are available tend to be more recent, which may be a function of the growth and influence of the Internet, which allows for broader dissemination of such publications.

Finally, numerous publications capture the *practice* literature - the anecdotal, descriptive literature, as well as information about current practice and content-specific research related to accelerated learning options. There is a considerable amount of work that has been conducted in this area (e.g., Wilcox, 1959; *College Composition*, 1959; Sauer, 1960; Blagaich, 1999; Briley, 2000). Also within this category are publications that concentrate on content and subject-specific material, such as what happens to students who take AP Spanish once they enter college (Klee and Rogers, 1989) and how well AP students perform on the Trends in International Mathematics and Science Study (TIMSS) advanced math and physics tests (Gonzalez, O'Connor, and Miles, 2001). Other publications take a historical account of accelerated learning options, some of them concentrating on specific states or programs (Godsey, 1990; Rothschild, 1999; Puyear, Thor, and Mills, 2001; Catron, 2001), while a few

articles have focused on how to structure successful dual/concurrent models (Andrews, 2000; Peterson, Anjewierden, and Corser, 2001; Jordan, 2001; Helfgot, 2001; Chapman, 2001). Although not a central concern of this review, these works are prominent in the literature.

State Policy

Most of the publications related to state-level accelerated learning policy have emerged from national and regional policy organizations, as well as foundations and other organizations interested in this strategy as a mechanism for increasing access to college, improving student preparation, and saving money. Although many policymakers and education leaders frequently assume that accelerated learning accomplishes these goals, there is little definitive evidence to support these assumptions. Proponents argue that the benefits of these options include saving money, increasing access to postsecondary education, helping students with the transition with to college, and improving the quality of technical training for workers and students. Problems examined relate to the quality of the courses, the potential negative impact on high schools, and the possibility that underserved students, because they are underrepresented in these programs, are actually at a disadvantage in terms of access to college (Clark, 2001).

Policy literature on accelerated learning options comes from national and regional policy organizations, such as the Education Commission of the States (ECS), the National Conference of State Legislatures (NCSL), and the Southern Regional Education Board (SREB). Most of this work is time limited because the articles summarize policies that existed in the past; they often provide options or recommendations in an effort to reach policymakers and decision makers so they are better informed about the policy environment, existing obstacles, and solutions.

With the proliferation of accelerated learning policies in the states and numerous ways of defining different programs, comparing the findings of these reports is difficult. Although the specific findings of these reports vary somewhat, they provide policymakers with a sense of how states approached these important issues at a particular point in time. Reports from NCSL, ECS, and others focus on dual/enrollment programs created through statutes (not board rules and regulations) and discuss selected state policies. NCSL (2001) reports that in 2000, at least 32 states had laws establishing or governing such programs: 27 states had statutes describing minimum eligibility requirements; 30 states addressed how the program should be structured and provided program guidelines; and seven states required

some form of state-level accountability for either the high school or postsecondary institution.

ECS (2001) also summarizes the policies in the 50 states; categorizes policy activity according to states' comprehensive programs and limited programs; and describes incentives and barriers. ECS found that in 2000, 19 states had state statutes; 14 states had board policies; 14 states had institutional policies; 21 states had comprehensive programs; and 26 states had limited programs.

Frazier (2000) found that 23 states established dual/concurrent enrollment programs through legislation. Using a slightly different approach, SREB (2005) provides one-page summaries of each SREB state's policies, programs, and requirements related to the transition from high school to college and careers. Dual/concurrent enrollment is only one component, but the publications summarize the dual/concurrent enrollment state policies in the region.

Depending on the definitions and methods used, as well as the time frame in which the research was conducted, each study has slightly different findings, but the guidance and general information they provide may prove useful to policymakers.

One notable exception to the trend of policy articles emerging from policy organizations is Boswell (2001). Her article, which provides an overview similar to what NCSL, ECS, and others have done, was published in an academic, peer-reviewed journal. Her study describes the range of dual/concurrent enrollment programs, discusses some of the factors driving interest in these options, summarizes the state policies that support accelerated learning, and provides examples of model state policies.

Of the reports that synthesize activity related to accelerated learning, most concentrate on dual/concurrent enrollment, although there are a few exceptions. ECS (2000), for example, summarizes state-level policies concerning AP courses and examinations. The report provides a summary table of state policies along with examples of state policies with respect to mandates for AP courses; district, teacher, and student incentives; and other state policies. SREB (2003) also examines both AP and IB and provides data on the percentage of public schools that offer these programs in the region, compared to the nation; the number of students who participate in AP and IB; the number of students who pass the examinations; and state actions related to these two programs.

ECS (2005) explores issues related to dual/concurrent enrollment by summarizing the findings of three reports: *State Dual Enrollment Policies: Addressing Access and Quality*; *Promoting College Access and Success: A Review of Credit-Based Transition Programs*;

and *College-Level Learning in High School: Purposes, Policies, and Practical Implications*.

There has been a growing interest in dual/concurrent enrollment by other researchers and organizations. Bailey and Karp (2003) provide policy-focused research, offering a review of 45 published and unpublished reports, articles, and books on the most common credit-based transition programs, including dual enrollment, AP, IB, Tech-Prep, and “middle college high schools” (small high schools from which students leave with a high school diploma and an associate’s degree or sufficient college credits to enter a four-year, liberal arts program as a junior). The researchers examine the programs’ characteristics and explore what is known about their ability to increase academic success. Unlike prior reports, this work is a comprehensive examination of research on credit-based transition programs that reached both the research and policy communities. By providing a thorough description and analysis, Bailey and Karp establish a basis on which policymakers and researchers can build.

Also more recently, some private foundations and other organizations, mostly university based, have begun showing interest in this topic. One of the most comprehensive studies is a report of programs and policies related to dual credit (Clark, 2001). Clark describes four types of dual credit programs: Type I (exam preparation), Type II (school-based), Type III (college-based), and Type IV (career preparation). His findings suggest a need for more and better evaluation of dual credit initiatives. Supporting this notion is evidence from a survey of higher education institutions, which suggests that there is surprisingly little evaluation of the impact of the dual enrollment policies on the student (Cambra, 2000).

There is also growing interest regarding underserved students. Bragg, Kim, and Rubin (2005) summarize a variety of academic pathways to reach underserved students, which include AP, dual/concurrent enrollment, IB, and Tech-Prep. They find that although dual/concurrent enrollment is a distinct academic pathway, it often is integrated into other models, including Tech-Prep or middle or early college high schools. Often these programs target underserved students, while AP and IB tend to be reserved for academically prepared students.

Another collection of works that influence the policy process has begun to emerge from organizations with an advocacy role. Hoffman and Robins (2005) suggest that dual enrollment, if structured properly, can accustom students to the demands of college while supporting them in meeting those demands within their more familiar high school environments. Through a review of dual enrollment in New England, they find that the major challenge facing expansion

of dual enrollment is the absence of legislation and institutional policies that would allow college courses to replace high school courses in order to accelerate students through postsecondary education. They further find that there is a shortage of high school or college funds used to pay for the participation of high school students in postsecondary courses and programs.

Institutional Policy and Practice

One of the driving questions related to accelerated learning is how institutions treat credit earned by high school students. Yet there is surprisingly little research that comprehensively examines the policies and practices of postsecondary institutions. Early on, finding no decisive evidence that AP examination scores actually are predictive of grades earned in accelerated subject fields, Bergeson (1968) recommended that colleges and universities examine their policies concerning the granting of credit to Advanced Placement applicants on the basis of exam scores because institutions vary so much in the type and amount of credit given. Interestingly, the same call for an examination of the institutional policies seems to be happening 38 years later.

Through a questionnaire administered in the 1998-99 academic year to a national sample of colleges and universities, Johnstone and Del Genio (2000) conducted one of the few studies that addresses this issue directly. They conclude that postsecondary institutions are willing to accommodate college-level learning in high schools, yet overall receptivity toward granting graduation credit and encouraging early graduation varies by institutional selectivity. In terms of AP, they find that the higher an institution’s average entering SAT score or the lower its admissions rate, the greater the number of freshmen carrying AP credits with exam scores of at least 3. Finally, Johnstone and Del Genio find that there are concerns within institutions about quality when high school-based college-level classes are sponsored by institutions other than their own. This also correlates with institutional selectivity: almost two-thirds of the selective and Baccalaureate I institutions and 40 percent of other universities expressed this concern, compared to only 12 percent of the two-year colleges.

In a less comprehensive study, Cambra (2000) finds that nearly all of the institutions studied accept dual/concurrent credits, recognize nationally normed examinations (AP and IB), treat dual credits as they do any other credits on a transcript, and perceive the value of dual credits in addressing the needs of exceptional students. The result of this, however, is that minority students are likely at a disadvantage because not all students have equal access to programs. There is inequity in that some students have

opportunities to take advantage of these programs, while others do not. Solorzano and Ornelas (2002) find that students who do not have access to AP programs are at a distinct disadvantage when it comes time to apply for university admissions. Their framework, however, suggests that members of marginalized groups can be agents of their own transformation if certain K-12 and university admissions recommendations are followed.

Soder (2000) examines data on policies and practices regarding dual credit programs, but his approach concentrates on the K-12 sector rather than postsecondary institutions. He surveys high schools and their district central offices, as opposed to postsecondary institutions. Five key issues emerge from his surveys and interviews:

- **Access:** There may be variable access to dual/concurrent enrollment opportunities, based on ethnicity and socioeconomic status.
- **Evaluation:** There appears to be a lack of evaluation in terms of whether courses are of college-level rigor.
- **Role of the Student and the School:** High school students in college-level courses are likely to perform less well because they do not have the support systems that high schools provide; and granting college credits to high school students is nothing more than enabling behavior leading them to be more dependent and not responsible for their own learning.
- **Impetus for Programs:** It is unclear where the impetus for establishing dual/concurrent credit programs originates.
- **The Entrepreneurial Possibilities:** There is little evidence to suggest that any of the schools are moving into questionable entrepreneurial practices.

When considering institutional policy and practice, the role of accelerated learning programs in the college admissions process is an underlying issue. Although findings from the student focus groups described in Chapter 5 suggest that high school students believe that participating in AP and IB will enhance their college applications and make them more attractive to postsecondary institutions, findings from the survey of postsecondary institutions described in Chapter 3 suggest that accelerated learning options appear to have limited impact on admissions. The gap between student perceptions and institutional practice is also reflected in the literature, as described later in this review.

In terms of Tech-Prep, most research has focused on program implementation and compliance with requirements, as opposed to the relationship between Tech-Prep and student performance in college and

work (Bragg, 2000). One study attempts to fill this niche, however. Bragg (2001) conducted a four-year longitudinal study involving eight local consortia and found that Tech-Prep tends to center on secondary education; that the goals and policies are broadening; and that the notion of target populations is shifting toward all students. Further, during the 1990s, Tech-Prep was often linked to state-level efforts to raise academic standards and enhance academic course taking.

Student Participation, Performance, Persistence, and Time to Degree

Overall, scholars and policy researchers disagree about the effects of the various accelerated learning options on student participation, persistence, and completion. Bragg, Kim, and Rubin (2005), for instance, find “limited and sketchy” evidence that such academic pathways influence student outcomes.

Student Participation

Minority and low-income students are less likely to attend college than higher-income students and those who are not racial/ethnic minorities (Harvey and Anderson, 2005; *Access Denied*, 2001). With changing demographic patterns nationwide, including a growing Hispanic population in many parts of the country, this is becoming a national concern. The Western Interstate Commission for Higher Education (2003) projects that there will be nearly the same number of Black, non-Hispanic high school graduates in 2007-08 as in 2001-02: 7.3 million students. The biggest change, however, will come among Hispanic high school graduates, whose share will grow from nearly 17 percent in 2001-02 to a projected 21 percent in 2007-08, with nearly 9.2 million students graduating that year. Because the people who have traditionally been served most poorly are those who are increasing in number most rapidly, policymakers and researchers have begun to recognize the importance of increasing access to accelerated learning options for underrepresented students, and they have also been working to find strategies to serve them better.

When examining student participation, it is important to understand who the programs intend to serve. One of the earliest studies, Hedrick (1960), found that approximately 70 percent of the schools that granted college credit by examination indicated that they adopted the program to “aid the able, highly motivated” student. The context for accelerated learning programs has changed significantly since 1960, and these options are now more accepted and utilized as a strategy to reach students who have traditionally been underserved.

Research related to race/ethnicity and income level with respect to AP examinations contends that credits earned through satisfactory performance on AP examinations may enable black students to graduate a semester or two early, which would reduce the cost of a college education (*Journal of Blacks in Higher Education*, 1998). During the early 1990s, blacks made significant inroads into AP programs, but now their progress appears to be leveling off. When the study was published, overall black participation in AP program, as well as black student performance on AP examinations, remained far below that of whites. Similarly, only a few years earlier, the same journal published an article showing that black student performance on AP exams was far below that of white students, especially at the highest levels of AP scoring: more than 12 percent of all white students scored a 5 on the exam but only 3.8 percent of black students did.

This participation and performance gap in AP raises questions about its use in college admissions. Geiser and Santelices (2004) suggest that institutions reconsider their policies regarding the use of AP as a criterion in “high stakes” admissions, especially given the significant disparity in access to these courses among disadvantaged and underrepresented students. For instance, through case studies, Yonezawa, Wells, and Serna (2002) find that minority students face obstacles to participating in accelerated learning programs even when schools expand access to them with the specific intent of reaching those students. In some cases, structural barriers prevent students from enrolling in the more challenging courses, but in many cases, cultural differences are the primary barrier.

Other research suggests that rather than reconsidering policy, outreach is the solution. Hugo (2001) finds that dual/concurrent enrollment can be instrumental in helping minority students gain admission to competitive colleges and universities, but that outreach must be an “academic and not just a public relations function.”

Originally citing Adelman (1999) and later Adelman (2006), who found a relationship between a rigorous high school curriculum and postsecondary success, many researchers and policy analysts now promote the notion that all students would benefit from participating in accelerated learning options. Bailey, Hughes, and Karp (2002) suggest that dual/concurrent enrollment has the potential to go from serving a small number of high-achieving students to facilitating the high-school-to-college transition for a broad range of students. Their analysis suggests that dual/concurrent enrollment may improve college preparation; motivate students to take a more rigorous high school curriculum; provide an early warning signal about whether students are adequately prepared for college; and acclimate students to a college environment. Martinez and Klopott (2005) examine the predictors of

college-going behavior and conclude that the success of minority and low-income students is attributed to, among other things, access to a rigorous academic common core curriculum for all students. Specifically, they note that AP and IB might be a blueprint for school improvement if they reach all students rather than only some.

Although attitudes may be changing and access is increasing, national data suggest that all students do not yet have equal opportunity to participate in accelerated learning. In 2005, the National Center for Education Statistics published two companion reports that raised the visibility of dual/concurrent enrollment programs and addressed the issue of access and the availability of dual enrollment and exam-based courses. Waits, Setzer, and Lewis (2005) report that during the 2002-03 academic year, 71 percent of public high schools offered dual credit courses, 67 percent offered AP courses, and 2 percent offered IB courses. Similarly, Kleiner and Lewis (2005) find that during 2002-2003, 57 percent of all Title IV degree-granting institutions had high school students taking courses for college credit, while 98 percent of public two-year institutions had high school students taking courses for college credit.

The College Board (2001) notes that 43 percent of high schools in the U.S. do not offer AP courses. Further, although minority participation in AP has increased, students from urban, rural, and poor areas are still underrepresented. Waits, Setzer, and Lewis (2005) find that schools with the highest minority enrollment are least likely to offer dual/concurrent enrollment or AP courses.

Performance and Persistence

Despite over 50 years of literature on persistence in college, few researchers, if any, specifically examine the effects of accelerated learning programs on persistence. Related research on academic performance, however, is worth discussion.

An early researcher, Bergeson (1968), reported no decisive evidence that AP examination scores actually were predictive of grades earned in accelerated subject fields. In his study, low scores on the examinations did not clearly result in disappointing grades in advanced college courses. More recently, Geiser and Santelices (2004) find that performance on AP examinations is strongly related to college performance, but merely taking AP or other honors-level courses in high school is not a valid indicator of the likelihood that students will perform well in college. Klopfenstein and Thomas (2005b) find that after controlling for the balance of a student’s high school curriculum, family, and school characteristics, AP students are generally no more likely than non-AP students to return for a second year of college or to have higher first-semester grade

point averages. Using results from the Texas Schools Microdata Panel, which included a sample of 28,000 Texas high school graduates who attended 31 four-year Texas public universities in the fall of 1999, they suggest that “while a rigorous high school curriculum clearly impacts the likelihood of early success in college, AP courses are not a necessary component of a rigorous curriculum.”

In contrast, Morgan and Ramist (1998) study the performance of students who received college credit as a result of taking the AP examinations. Specifically, they look at students in their first and second year (previous studies had mostly only examined students in their first year) at 21 diverse postsecondary institutions. Through a comparison of the performance in upper-level courses of those receiving advanced placement based on their AP test grades with those who took the introductory college courses, they found that AP students performed very favorably when compared to students who took the prerequisite courses. For every exam/course-level combination, those receiving scores of 5 on the AP examination had higher course grade averages than the students who took the prerequisite course.

Klopfenstein and Thomas (2005c) posit that a high school curriculum characterized by rigorous non-AP math and science courses improves the likelihood of early college success, but the AP experience provides little additional benefit.

Even within states, there often are mixed results in terms of college performance of dual/concurrent enrollment students. Despite concerns in Florida that dual/concurrent enrollment students had to retake courses once they entered the university, Windham (1997) finds that they had the same or higher average grade point averages at the University of West Florida as all transfers to that university.

Time to Degree

For years, researchers and policymakers have questioned whether accelerated learning options lead to shortened time to degree. Some scholars have found that these courses decrease the duration and expense of a college education. One of the earliest studies examining accelerated learning strategies and the effects of acceleration found that acceleration decreased the expense and duration of an undergraduate program (Chapman, 1962). At that time, some educators were opposed to acceleration, citing the concern that it may result in academic deficiencies or social inadequacies. By comparing the achievements of accelerates with non accelerates of equal preparation (as measured by New York State Regents Examination grade scores), Chapman provided

evidence that there was no reason for concern. Those in accelerated programs did not appear to have been handicapped by their decreased time in undergraduate college, at least in terms of obtaining advanced degrees and undertaking graduate work. However, evidence did not suggest that accelerates undertook graduate work in significantly greater numbers than those who did not enroll in acceleration programs. Overall, those who had earned accelerated credits and graduated in three years had achievements in education and community participation similar to four-year graduates.

More recently, Cusker (1999) finds that the evidence supporting the notion that AP leads to shorter time to degree is “sporadic and not convincing.” Her work suggests that AP can be a factor if academic policies permit the liberal use of the credit. In order for students to earn college credit through AP, they must take the AP examination, however, and the College Board (2001) reports that 34 percent of students enrolled in AP courses do not take the test.

Student Perspectives

Johnstone and Del Genio (2000) recognize that very little work has been done in the area of documenting student perspectives on accelerated learning options. Chapter 5 in this report summarizes WICHE’s efforts to discover what high school and college students think about accelerated learning options. Findings from the student focus groups suggest that teachers matter in terms of student participation in accelerated learning. Some students stated that they became involved because a teacher took extra interest and introduced him or her to accelerated learning options. Also, the accelerated learning teachers were perceived as more experienced and knowledgeable, and their approach was a change from that typically taken by high school teachers. Supporting this notion is an emerging body of literature that focuses on the role of teachers in increasing minority student success.

Burton, Whitman, Yepes-Baraya, Cline, and Kim (2002) examine what the students perceive, describing the characteristics and teaching behaviors of those who teach calculus AB and English literature, and composition and who have had success with minority students. Through an examination of 129 participating schools teaching calculus AB and 101 schools with courses in English literature and composition, they discovered that successful teachers of minority students were successful with all groups. Some of their characteristics include: expressing a high opinion of all students, holding all students to high standards, ensuring that students understand and can apply the fundamental concepts in the discipline, and helping

students and parents understand and feel comfortable about college.

Recognizing the importance of the effects of teachers on student success in AP, the College Board invests a great deal of resources researching this area. Writing for the College Board, Milewski and Gillie (2002) conducted the AP Teacher Survey in an effort to identify the characteristics of successful AP teachers. This analysis revealed that ethnic minority teachers were heavily underrepresented.

Finance

Literature on the financing of accelerated learning options is limited. The most pressing question - whether accelerated learning is a good investment of resources for states and students - has yet to be answered. Most research has emerged from national and regional policy organizations about how accelerated learning options are funded. Recently, however, some work has provided guidance to states on how to finance programs, while another body of literature is state-specific or focuses on one particular program.

Michelau (2001) notes that most states that have dual/concurrent enrollment programs established through statute indicate whether the state, district, or student pays the tuition for the courses. In most cases, the state or school district is responsible for costs directly related to the course, but the student and family are responsible for the cost of transportation.

Karp, Bailey, Hughes, and Fermin (2005) summarize the financing of dual/concurrent enrollment programs as involving two decisions: who pays the tuition and how the state average daily attendance and full-time equivalent funding streams are directed. The first decision addresses the costs of dual enrollment to the student and is only a small part of the overall funding of an institution. The second issue is more complex.

Other publications provide guidance for funding accelerated learning programs, in addition to simply summarizing state policies. Hoffman and Robins (2005) recommend financing dual/concurrent enrollment in a way that holds harmless the participating institutions, to move students through dual/concurrent enrollment in such a way that there are savings to the state, as well as to families.

Much of the remaining research is in the form of state-specific reports. For example, in 2001, Minnesota State Colleges and Universities estimated that the state government, the federal government, parents and students saved \$45 million from accelerated options. An annual report on Washington's Running Start program, a dual/concurrent enrollment program, reports savings to taxpayers of \$36.4 million in 2003-04.

Areas for Future Research

Although both scholarly and policy-based literature is growing in terms of quantity and quality, there is still a great deal of work that can be done to better inform policymakers, researchers, and educators about accelerated learning options and their effects. Some specific areas that researchers might consider are:

- Initiate or expand state-level analysis to more fully understand what happens to students who participate in accelerated learning options. Researchers conducting rigorous, longitudinal studies about the effects of accelerated learning face the obvious challenge of states simply not collecting data in a way that lends itself to such analyses. As more states are adopting K-12 and higher education databases that can be merged or utilized together, this type of research is likely to proliferate.
- Conduct more thorough analysis on the financing of accelerated learning options. Too often, states are funding accelerated learning with little understanding of how much they are investing and what the return on their investment is. More robust research in this area would benefit states, institutions, students, and their families.
- Focus on what the students say. There are very few studies about student perceptions of accelerated learning options, yet they are the primary consumers. A better understanding of what both high school and college students think about the various opportunities, their motivations, and whether participation is worth the effort can help policymakers better invest limited resources, identify problem areas, and develop effective solutions.

Appendix B

A State-Level Policy Audit

Demarée K. Michelau

Introduction

An important component of the *Accelerated Learning Options* study is a comprehensive audit of state-level policies related to the four options under review: the College Board’s Advanced Placement (AP) Program, dual/concurrent enrollment, the International Baccalaureate (IB) Diploma Program, and Tech-Prep. This appendix explains how this audit was conducted and summarizes selected state-level policies found in statute and board rules. The reader is encouraged to consult the state laws and board rules for complete information. Statutory citations and board rule references are given at the beginning of each section, as the summary may reference multiple sources.

Methodology

This audit of state-level policies related to accelerated learning, including AP, dual/concurrent enrollment, IB, and Tech-Prep, tracks statutes in all 50 states. The Western Interstate Commission for Higher Education (WICHE) worked with the National Conference of State Legislatures (NCSL) to conduct the search, in conjunction with the maintenance and updating of WICHE’s State Policy Inventory Database Online (SPIDO). This web-based tool is designed to provide state and national policymakers, education leaders, practitioners, and researchers with an inventory of state-level policies and resources in key policy domains related to student achievement, access, and success in higher education (www.wiche.edu/policy/SPIDO/index.asp). As part of this study, accelerated learning was designated as a new domain, which will be updated annually.

NCSL provided an initial list of state statutes, and WICHE staff subsequently reviewed the laws to determine their relevance. To find applicable board policies, which include state-level policies related to accelerated learning at state higher education executive offices (SHEEO) and state departments of education, WICHE staff searched the agency web sites. A state policy summary for accelerated learning was then written for each state. WICHE staff asked a representative from the SHEEO office in each state to review these brief summaries to ensure that nothing had been inadvertently omitted or misrepresented. Thirty-five states approved the summaries, and those that did not are marked with an asterisk.

ALABAMA*

(State Department of Education AAC Rule 290-3-1-.02(c)2, 290-3-1-.02(10)(a)3)

Advanced Placement

None.

Dual/concurrent Enrollment

Local boards of education may establish dual enrollment programs allowing high school students to enroll in postsecondary institutions in order to dually earn credits for a high school diploma and/or a postsecondary degree at both the high school and participating postsecondary institution. Students participating in a dual enrollment program must pay normal tuition as required by the postsecondary institution and meet the following requirements:

- Have a “B” average in completed high school courses.
- Have written approval of the student’s principal and superintendent.
- Be in grade 10, 11, or 12 or have an exception granted by the participating postsecondary institution upon the recommendation of the student’s principal and superintendent.

Students enrolled in grade 10, 11, or 12 who do not have a “B” average in completed high school courses may be deemed eligible to participate in dual enrollment courses pending demonstrated ability to benefit as documented by successful completion and placement identification on assessments approved by the Department of Postsecondary Education. In this case, students will be restricted to pursuing career/technical and health-related courses and must have earned a “B” average in high school courses related to the occupational/technical studies, and have maintained an overall grade point average of 2.50. These students must also have written approval of the students’ principal and superintendent. Courses must be postsecondary/college level, and postsecondary/college level remedial courses do not meet the requirements of this program. Students enrolled in courses offered during the normal high school day on or off the high school campus must have prior permission of the students’ principal, superintendent, and the participating postsecondary institution president. Local boards of education must adopt policies addressing parental permission and travel for courses offered off the high school campus during the normal school day. Ten quarter/six semester credit hours at the

postsecondary level equals one credit at the high school level in the same or related subject. Partial credit agreements must be developed between the local board of education and participating postsecondary institutions.

International Baccalaureate

None.

Tech-Prep

None.

ALASKA

There are no state-level policies related to accelerated learning options in Alaska.

ARIZONA

Advanced Placement

None.

Dual/concurrent Enrollment

(Ariz. Rev. Stat. Ann. § 15-701.01; Ariz. Rev. Stat. Ann. § 15-1807; Ariz. Rev. Stat. Ann. § 15-1821.01)

The Arizona Board of Regents and each community college district board must adopt policies that require institutions within their jurisdiction to admit students under age 18 who have not yet attained a high school diploma or high school certificate equivalency and who meet the established requirements of the courses for which they enroll. Community college district governing boards may authorize community colleges to offer college courses that count toward both high school and college graduate requirements. Graduation requirements may be met by a student who passes courses in the required or elective subjects at a community college or university if the course is at a higher level than the course taught in the high school or - if the course is not taught in the high school - the level of the course is equal to or higher than the level of a high school course. The governing boards of the community college district and the school district must enter into an agreement or contract that, at a minimum, addresses the responsibility of the community college and of the high school for payment for facilities and personnel and the manner in which the college tuition is to be paid by or on behalf of each student. Students must be enrolled as juniors or seniors and must meet minimum requirements for the course. A community college may waive the class status requirements for 25 percent of the students enrolled in courses provided there. Courses must be previously evaluated and approved through the curriculum approval process and must be at a higher level than those at the high school. Each community college district must report annually to the legislature's joint budget committee on the courses offered in conjunction with high schools during the previous fiscal year. In addition, each district must conduct annual tracking studies of subsequent academic or occupational

achievement of students enrolled in postsecondary courses. The tracking studies must include, at a minimum, the high school graduation rate, the number of students continuing their studies after graduation at a community college or university in Arizona, the performance of the students in subsequent college courses in the same discipline or occupational field, and the student's grade point average after one year at an Arizona postsecondary institution, as compared to the student's college grade point average for courses completed while still in high school. Finally, each community college district and the Arizona Board of Regents must provide all high schools with information that describes the policies and rules, the types of courses available, and other information related to the enrollment of students under the age of 18.

International Baccalaureate

None.

Tech-Prep

None.

ARKANSAS

Advanced Placement

(Ark. Stat. Ann. § 6-16-805; Ark. Stat. Ann. § 6-16-803; Ark. Stat. Ann. § 6-16-1202; Ark. Stat. Ann. § 6-16-1203; Ark. Stat. Ann. § 6-16-802; Ark. Stat. Ann. § 6-16-1204; Ark. Stat. Ann. § 6-47-501; Ark. Stat. Ann. § 6-15-2504; Ark. Stat. Ann. § 6-16-804; Ark. Stat. Ann. § 6-15-2006; Ark. Stat. Ann. § 6-15-902; Ark. Stat. Ann. § 6-65-222; Ark. Stat. Ann. § 6-16-801; Ark. Stat. Ann. § 6-15-901)

According to Arkansas state law, an AP course is a course of instruction that qualifies for college credit and that is approved for credit as a high school course by the Arkansas Board of Education. Each district school board must annually report in writing to the state board of education by grade level the number of students taking AP courses, the number taking the AP exams, and the percent of students making a 3, 4, or 5 on AP exams. The state established the Arkansas Advanced Placement Incentive Program (now called the Arkansas Advanced Placement and International Baccalaureate Diploma Program), which is designed to provide advanced educational courses that are easily accessible and that will prepare students for admission to and success in a postsecondary educational environment. Under this program, AP courses specifically refer to high school preparatory courses for an AP test that incorporate all topics specified by the College Board and Educational Testing Service on its standard syllabus for a given subject area. In order to prepare students for the rigor inherent in AP courses, school districts must offer pre-AP courses. The department of education must approve all classes designated as pre-AP courses and develop rules necessary for the implementation of AP courses. Beginning with the 2008-2009 school year, all school districts must offer one College Board AP course in

each of the four core areas of math, English, science, and social studies. The requirement is being phased in over four years, beginning with the 2005-2006 school year. Contingent upon legislative appropriations and based on criteria established by the department of education, schools participating in the program may be awarded a one-time equipment and instructional materials grant for providing an AP course. Also contingent upon legislative appropriations, schools will be awarded \$50 for each score of 3 or better earned by a student on any AP test. These funds must be utilized in the schools' AP Programs. Further contingent upon legislative appropriations, a teacher participating in the program or in the pre-AP Program may be awarded subsidized teacher training for AP courses at a cost not to exceed \$650 per teacher. The state will pay a share of the cost of the AP test fee, not to exceed \$65. Further, the state will pay \$50 for each test taken to each public school student who takes more than two AP courses in one year.

Another key component in the program is adequately preparing teachers and schools in providing AP courses to their students. The state board of education must establish clear, specific, and challenging training guidelines that require teachers of the College Board AP courses and teachers of pre-AP courses to obtain College Board-sponsored or endorsed training. The state recognizes that the primary purpose of distance-learning technologies is, in part, to assist school districts in making AP courses available.

Dual/concurrent Enrollment

(Ark. Stat. Ann. § 6-15-902; Ark. Stat. Ann. § 6-15-2504; Ark. Stat. Ann. § 6-16-1202; Ark. Stat. Ann. § 6-16-1205; Ark. Stat. Ann. § 6-18-223; Ark. Stat. Ann. § 6-60-202; Arkansas Higher Education Coordinating Board Policy 5.16.1)

Students in high school who are accepted for enrollment in a public institution of higher education are considered part-time students. A qualified student is one who has been recommended for enrollment by the high school principal and who meets the minimum criteria for participation in the AP Program. The student must have successfully completed eighth grade, and if he or she successfully completes the postsecondary courses, the student is entitled to receive credit at both the postsecondary institution and the high school, which is applicable to graduation requirements. A concurrent enrollment course approval panel makes recommendations to the department of education and the department of higher education regarding the rules for offering AP courses and concurrent enrollment courses. Arkansas Higher Education Coordinating Board policy further specifies the terms regarding the program. Postsecondary institutions charge the regular rate of tuition for concurrent enrollment students unless the institution has a board-adopted tuition reduction policy for students who meet specific criteria. Institutions may

not claim student semester credit hours or funding if tuition is not received or if the course is offered only for high school credit. Prior to enrollment in college English or math, the student must be tested and a written contract must exist to reflect the various expectations, obligations, and responsibilities of all parties.

International Baccalaureate

(Ark. Stat. Ann. § 6-16-804; Ark. Stat. Ann. § 6-16-803; Ark. Stat. Ann. § 6-16-802; Ark. Stat. Ann. § 6-16-1206; Ark. Stat. Ann. § 6-16-805; Ark. Stat. Ann. § 6-15-2006; Ark. Stat. Ann. § 6-15-902; Ark. Stat. Ann. § 6-16-801)

The state established the Arkansas Advanced Placement Incentive Program, but as of 2005, the state legislature changed the law to become the Arkansas Advanced Placement and International Baccalaureate Diploma Program in an effort to include IB in the state's extensive AP law. Please refer to the above description of Arkansas' policies on the Advanced Placement and International Baccalaureate Diploma Program.

Tech-Prep

(Ark. Stat. Ann. § 6-53-502; Ark. Stat. Ann. § 6-53-501)

A Tech-Prep education program is a combined secondary and postsecondary program that leads to an associate of applied science or other occupational degree or two-year certificate; provides technical preparation in engineering technology, applied science, agriculture, health, business, or mechanical, industrial, or practical art or trade; builds student competence in mathematics, science, and communications; and leads to placement in employment.

CALIFORNIA

Advanced Placement

(Cal. Education Code § 99151; Cal. Education Code § 58907; Cal. Education Code § 52055.640; Cal. Education Code § 47634; Cal. Education Code § 33126; Cal. Education Code § 11020; Cal. Education Code § 99222; Cal Ed. Code § 52240-52247)

The majority of California law regarding accelerated learning options relates to the AP Program. The legislature explicitly states that AP courses provide rigorous academic coursework opportunities for high school students and help improve the overall curriculum. A school district receiving funds may expend any portion of those funds to pay for all or part of the costs of one or more AP examinations for economically disadvantaged students. As part of the Advanced Placement Challenge Grant Program, which although no longer funded is still in statute, the superintendent of public instruction must submit a report to the legislature describing the effectiveness of the pilot grant program that covers the cost of AP test fees. The purpose of the program was to assist California public high schools in providing access to rigorous, academically challenging, college-level

courses to interested and prepared students in the state. In addition, there was an explicit statement that allowed local education agencies to submit proposals to the superintendent of public instruction to fund activities that increased the percentage of students at qualifying high schools who meet the requirements for admission to the California State University or the University of California. The superintendent recommended, and the state board of education adopted, criteria for the implementation of the program, which included significant increases in the number and percentage of students who enroll in and complete AP courses and receive a 3 or above on the examination. Further, there are several accountability and funding requirements that are linked to the AP Program. California requires schools to create a school accountability report card, so parents can make informed decisions about public schools. The report card must include the number of AP courses offered, by subject. As a condition of the receipt of funds and to ensure that the school is progressing toward meeting the goals of its action plan, the school district must submit a report to the superintendent of public instruction that includes the number of students who are enrolled in and who successfully complete AP courses, by type. When annually computing the categorical block grant amount for charter schools, the superintendent of public instruction must limit the aid to a number of programs, one of which is the AP Program.

Dual/concurrent Enrollment (Cal Ed. Code § 48800-48802)

According to the California Department of Education, local education agencies have the option to allow concurrent enrollment of K-12 students in community colleges, but under fairly strict guidelines. The state repealed a regulation that prohibited dual credit, so students can receive credit in both high school and community colleges for approved courses.

International Baccalaureate

(Cal. Education Code § 52922; Cal. Education Code § 52921; Cal. Education Code § 52920)

California law states that the IB Diploma Program is a comprehensive and rigorous two-year curriculum leading to examinations for high school students. The objectives of the program are to provide students with a balanced education, to facilitate geographic and cultural mobility, and to promote international understanding through a shared academic experience. School districts that operate an IB program must submit the following information to the state department of education:

- The number of students enrolled in courses leading to an IB diploma in each school district.
- The number of teachers in each school district attending training programs offered by the International Baccalaureate North America.

- The number of teachers in each school district participating in pre-IB support programs.
- The amount of money spent by the school district to provide or participate in the program.

Tech-Prep

(Cal. Education Code § 53082)

California law also touches on Tech-Prep by defining “local partnerships” as a defined system designed to deliver school-to-career programs.

COLORADO

Advanced Placement

(Colo. Rev. Stat. §22-11-104)

According to Colorado state law, the accreditation indicators for assessing the quality of education and learning in the public schools and school districts must include, among other things, the percentage of students taking AP courses.

Dual/concurrent Enrollment

(Colo. Rev. Stat. §22-35-102; Colo. Rev. Stat. §22-35-101; Colo. Rev. Stat. §22-35-108; Colo. Rev. Stat. §22-35-106; Colo. Rev. Stat. §22-35-109; Colo. Rev. Stat. §22-35-104; Colo. Rev. Stat. §22-35-103; Colo. Rev. Stat. §23-60-103; Colo. Rev. Stat. § 22-34-101; Colo. Rev. Stat. § 22-35-107; Colo. Rev. Stat. §22-35-111; Colo. Rev. Stat. § 22-35-105; CCHE Policies and Procedures – Academic Affairs – Section I, Part F)

The state passed the Postsecondary Enrollment Options Act because high school students need to be continually challenged in order to maintain their academic interests. Such challenges must include rigorous academic pursuits. For some students, exposure to such academic challenges declines during the last two years of high school; there is a high rate of dropouts at the 11th and 12th grade levels. These enrollment opportunities provide access to excellence in education. Any student who enrolls in postsecondary courses should be expected to show a high degree of maturity and responsibility, especially with regard to the successful completion of such courses. Any student who is not more than 21 years old, is enrolled in 11th or 12th grade, and is deemed by the student and the student’s parent or legal guardian, with the advice and counsel of the principal of the high school, to be in need of coursework at a higher academic level than that available at the student’s school, or is deemed by the high school to be in need of a different environment, is eligible to apply to a postsecondary institution. The school district must notify all students and parents of the opportunity for postsecondary enrollment in sufficient time to allow them to consider this option. Any student who wants to enroll in an institution of higher education must give written notice to the school district of the intent to enroll at least two months prior to such enrollment. The written notice given must specify the courses in which the student

intends to enroll. Courses count for credit toward high school graduation requirements unless the credit is denied by the high school principal. When a student enrolls in courses at a postsecondary institution for high school credit, the school district and the institution of higher education must enter into a cooperative agreement regarding the enrollment of and funding method for the student, including, but not limited to:

- The high school academic credit to be granted for coursework successfully completed by the student enrolled in the institution of higher education.
- The requirement that such coursework qualify as credit applicable toward earning a degree or certificate at the institution of higher education.
- The requirement that the student will be reimbursed by the school district for the amount of tuition paid for such courses.
- Other financial provisions.

The postsecondary institution is responsible for course content and the quality of instruction and is reimbursed by the school district for costs. In addition, because the student is receiving high school credit, the student is included in the student enrollment of the school district. The institution of higher education in which the student is enrolled cannot include him or her in determining the number of full-time equivalent students enrolled. If students of any school district are enrolled in one or two courses per academic term offered by any postsecondary institution and are receiving high school credit for such courses, they are included in the enrollment of the school district; also, the institution of higher education in which the student is enrolled must include the student in counting full-time equivalent students. If students of any school district are enrolled in three or more postsecondary courses per academic term, any institution of higher education in which the student is enrolled includes the student in counting full-time equivalent students. If the student is not receiving high school credit for such course, the college or university includes the student in counting full-time equivalent students, and the student is responsible for paying tuition. The student or student's parent or guardian must pay the institution of higher education the amount of tuition (not to exceed the rate of in-state tuition) to which the institution of higher education would be entitled for a regularly enrolled student taking such courses. Tuition paid for the first two courses per academic term is subject to reimbursement by the school district. In addition, the school district may choose to reimburse the student or the student's parent or guardian for the amount of tuition paid for the third and each additional course per academic term. The school district decides whether the student should receive high school credit for the courses offered by the postsecondary institution. Upon passage of any postsecondary course, the student or the student's parent or guardian must present evidence

of such passage to the school district to receive reimbursement from the school district for the amount of tuition paid for such course. The school district pays the tuition for the first two courses per academic term for any student who is eligible for free or reduced-price lunch. In addition, the school district may enter into an agreement with a student to pay tuition in situations where payment of such tuition would constitute a financial hardship for the student or the student's parent or guardian and the student has shown evidence of responsibility for and commitment to successfully completing postsecondary courses. Prior to paying the tuition for any student, the school district requires that the student and his or her parent or guardian sign a promise to repay the amount of tuition paid by the school district on the student's behalf if the student fails or otherwise does not complete the postsecondary course without the consent of the principal of the high school. The school district is not responsible for transportation.

International Baccalaureate

(Colo. Rev. Stat. §23-1-113.2)

State law recognizes that it is in the best interest of the state to encourage the development and adoption of innovative and effective curricula for high school students. As part of this, the state indicates that the IB Diploma Program is an established and well-respected program designed to provide innovative curricula worldwide. A student who has successfully completed this program is viewed as highly attractive to institutions of higher education, due to the student's ambition, work habits, and scholarship. In an effort to retain the state's best and brightest students, Colorado requires postsecondary institutions to adopt comprehensive and reasonable policies to offer credit to IB students, including setting the number of credits that the institution may grant to a student who has successfully completed an IB Diploma Program. Each institution may determine the level of student performance necessary to grant the credits.

Tech-Prep

None.

CONNECTICUT*

Advanced Placement

(Conn. Gen. Stat. § 10-76d; Conn. Gen. Stat. § 10-220g; Connecticut Board of Trustees of Community-Technical Colleges Policy Section 5 - Student Affairs)

Connecticut statute states that each local and regional board of education must establish a written policy concerning weighted grading for AP courses. The policy states that parents and students must be advised whether an AP course grade is or is not given added weight for purposes of calculating a student's grade point average. The planning and placement team of

the local or regional board of education must provide a statement of transition service needs for students with a disability who have individualized education plans. This statement must focus on the student's courses of study, including participation in AP courses. Connecticut Board of Trustees of Community-Technical Colleges policy authorizes community colleges to accept for AP high school students who demonstrate sufficient scholastic ability and who are approved by the high school principal or designated representative.

Dual/concurrent Enrollment

(Conn. Gen. Stat. § 10-221a; Connecticut Board of Trustees of Community-Technical Colleges Policy Section 5 - Student Affairs)

Statute related to dual/concurrent enrollment is limited to specifying that a credit consists of not less than the equivalent of a 40-minute class period for each school day of a school year, except for a credit or part of a credit toward high school graduation earned at a postsecondary institution. Connecticut Board of Trustees of Community-Technical Colleges policy, however, approves partnerships between community colleges and high schools and authorizes the chancellor to implement administrative policies and procedures necessary for programs that provide opportunities for high school students to attend accredited public postsecondary degree-granting institutions during their junior and senior years.

International Baccalaureate

None.

Tech-Prep

(Conn. Gen. Stat. § 10-95h)

Statute related to Tech-Prep concerns the establishment of a statewide advisory committee to recommend to the state board of education how alternative technical training models, such as Tech-Prep, can be expanded for students in grades 11 and 12.

DELAWARE

There are no state-level policies related to accelerated learning options in Delaware.

FLORIDA

Advanced Placement

(Fla. Stat. § 1003.02; Fla. Stat. § 1009.531; Fla. Stat. § 1007.272; Fla. Stat. § 1007.261; Fla. Stat. § 1007.27; Fla. Stat. § 1003.429; Fla. Stat. § 1002.23; Fla. Stat. § 1007.22; Fla. Stat. § 1002.31; Fla. Stat. § 1002.20; Fla. Stat. § 1006.31; Fla. Stat. § 1011.62)

Students who enter 9th grade may select from three high school graduation options, one of which is completion of a three-year standard college preparatory program. At least six credits must be received in classes that are honors, dual enrollment, AP, IB, or Advanced International Certificate of

Education. School districts must notify parents of students in or entering high school of the opportunity and benefits of AP. As part of the Family and School Partnership for Student Achievement Act, the department of education developed components of a parent guide to successful student achievement, which must include, among other things, opportunities for parents to learn about rigorous academic programs that may be available for their child, such as AP. Parents of public school students may seek whatever public school choice options that are applicable to their students and are available in their school districts. These options may include, among other things, AP. A variety of articulated acceleration mechanisms must be available for secondary and postsecondary students attending public educational institutions. Articulated acceleration, including AP, is designed to shorten the time necessary for a student to complete the requirements associated with earning a high school diploma and a postsecondary degree, broaden the scope of curricular options available to students, or increase the depth of study available for a particular subject. When calculating the grade point average to be used in determining initial eligibility for a Bright Futures Scholarship, the department of education weights AP courses. State law indicates that a value of 0.24 full-time equivalent student membership is calculated for each student in each AP course who receives a score of 3 or higher on the College Board AP examination for the prior year and is added to the total full-time equivalent student membership in basic programs for grades nine through 12 in the subsequent fiscal year. The school district distributes to each classroom teacher who provided AP instruction:

- A \$50 bonus for each student, taught by the AP teacher in each AP course, who receives a score of 3 or higher on the AP examination.
- An additional bonus of \$500 to each AP teacher in a school designated performance grade category "D" or "F" who has at least one student scoring 3 or higher on the AP examination, regardless of the number of classes taught or of the number of students scoring a 3 or higher on the AP examination.

Bonuses awarded to a teacher cannot exceed \$2,000 in any given school year. Each joint dual enrollment and AP course must be incorporated within and subject to the provisions of the district interinstitutional articulation agreement. This agreement must certify that each joint dual enrollment and AP course integrates, at a minimum, the course structure recommended by the College Board and the structure that corresponds to the common course number. Each student enrolled in a joint dual enrollment and AP course may be funded according to either the dual enrollment or AP formula; however, no student can be funded through both programs for enrollment in a course. The district school board reporting enrollments

for such courses must utilize the funding formula that more closely approximates the cost of conducting the course. No student can be reported for AP funding who fails to meet the examination requirement for such funding. Postsecondary credit for student completion of a joint dual enrollment and AP course will be awarded, based on the stated preference of the student, as either dual enrollment or AP credit; however, an award of AP credit is limited to students who score a minimum of 3 on a five-point scale on the AP examination. No student can claim double credit based on the completion of a single joint dual enrollment and AP course, nor is any student enrolled required to complete the AP examination.

Dual/concurrent Enrollment

(Fla. Stat. § 1007.271; Fla. Stat. § 1002.20; Fla. Stat. § 1003.429; Fla. Stat. § 1011.68; Fla. Stat. § 1000.041; Fla. Stat. § 1002.31; Fla. Stat. § 1002.23; Fla. Stat. § 1003.436; Fla. Stat. § 1002.34; Fla. Stat. § 1002.41; Fla. Stat. § 1003.02; Fla. Stat. § 1003.03; Fla. Stat. § 1003.43; Fla. Stat. § 1007.27; Fla. Stat. § 1007.263; Fla. Stat. § 1009.25; Fla. Stat. § 1011.62; Fla. Stat. § 1007.01; Fla. Stat. § 1004.65; Fla. Stat. § 1009.531; Fla. Stat. § 1007.22; Fla. Stat. § 1008.30; Fla. Stat. § 1007.235; Fla. Stat. § 1007.24; Fla. Stat. § 1007.272)

Dual enrollment in Florida is the enrollment of an eligible secondary student or home education student in a postsecondary course creditable toward high school completion and a career certificate or an associate or baccalaureate degree. An eligible secondary student is a student who is enrolled in a Florida public or private secondary school. Students are allowed to enroll in dual enrollment courses conducted during school hours, after school hours, and during the summer. Students who meet the eligibility requirements and who choose to participate in dual enrollment programs are exempt from the payment of registration, tuition, and laboratory fees. Instructional materials assigned for use within dual enrollment courses are made available to students from Florida public high schools free of charge. Community colleges are not prohibited from providing instructional materials at no cost to a home education student or student from a private school. Instructional materials purchased by a district school board or community college board of trustees on behalf of dual enrollment students are the property of the board against which the purchase is charged. The department of education approves courses for inclusion in the dual enrollment program that is contained within the statewide course numbering system. The commissioner of education appoints faculty committees representing public school, community college, and university faculties to identify postsecondary courses that meet the high school graduation requirements and to establish the number of postsecondary semester credit hours of instruction and equivalent high school credits earned through dual enrollment that are necessary to meet high school

graduation requirements. Such equivalencies must be determined solely on comparable course content and not on the seat time traditionally allocated to high school courses. The commissioner of education recommends to the state board of education those postsecondary courses identified to meet high school graduation requirements, based on mastery of course outcomes, by their course numbers, and all high schools must accept these postsecondary education courses toward meeting the requirements. The department of education adopted guidelines, designed to achieve comparability across school districts, of both student qualifications and teacher qualifications for dual enrollment courses. Students must demonstrate readiness for college-level coursework if the student is to be enrolled in college courses. Students must demonstrate readiness for career-level coursework if the student is to be enrolled in career courses. Career dual enrollment is provided as a curricular option for secondary students to pursue in order to earn a series of elective credits toward the high school diploma and is available for secondary students seeking a degree or certificate from a complete career-preparatory program. In addition to the common placement examination, student qualifications for enrollment in college credit dual enrollment courses must include a 3.0 unweighted grade point average, and student qualifications for enrollment in career certificate dual enrollment courses must include a 2.0 unweighted grade point average. Exceptions to the required grade point averages may be granted if the educational entities agree and the terms of the agreement are contained within the dual enrollment interinstitutional articulation agreement. Community college boards of trustees may establish additional admissions criteria, which must be included in the district interinstitutional articulation agreement. Additional requirements included in the agreement cannot arbitrarily prohibit students who have demonstrated the ability to master advanced courses from participating in dual enrollment courses, and district school boards may not refuse to enter into an agreement with a local community college if that community college has the capacity to offer dual enrollment courses. Each district school board must inform all secondary students and their parents of dual enrollment as an educational option and mechanism for acceleration. Students are to be informed of eligibility criteria, the option for taking dual enrollment courses beyond the regular school year, and the minimum academic credits required for graduation. The department of education developed a statement on transfer guarantees that informs students, prior to enrollment in a dual enrollment course, of the potential for the dual enrollment course to articulate as an elective or a general education course into a postsecondary education certificate or degree program. The statement is provided to each district school superintendent, who includes the statement in the information provided to all

secondary students. The statement may also include additional information, including, but not limited to, dual enrollment options, guarantees, privileges, and responsibilities. To meet the constitutional class size maximums, district school boards must consider adopting policies to encourage qualified students to take dual enrollment courses. As part of the Family and School Partnership for Student Achievement Act, the department of education developed components of a parent guide to successful student achievement, which must include, among other things, opportunities for parents to learn about rigorous academic programs that may be available for their child, such as dual enrollment. Parents of public school students may seek whatever public school choice options that are applicable to their students and are available to students in their school districts. These options may include, among other things, dual enrollment. A variety of articulated acceleration mechanisms must be available for secondary and postsecondary students attending public educational institutions. Articulated acceleration, including dual enrollment, is designed to shorten the time necessary for a student to complete the requirements associated with earning a high school diploma and a postsecondary degree, broaden the scope of curricular options available to students, or increase the depth of study available for a particular subject. The levels of postsecondary education must collaborate in further developing and providing articulated programs in which students can proceed toward their educational objectives as rapidly as their circumstances permit. Time-shortened educational programs, as well as the use of acceleration mechanisms, must include, but are not limited to, dual enrollment. District school boards must annually assess the demand for dual enrollment, and the district school board must consider strategies and programs to meet that demand. The dual enrollment program for home education students consists of the enrollment of an eligible home education secondary student in a postsecondary course creditable toward an associate degree, a career certificate, or a baccalaureate degree. To participate in the dual enrollment program, an eligible home education student must:

- Provide proof of enrollment in a home education program.
- Be responsible for his or her own instructional materials and transportation, unless provided for otherwise.

Each career center, community college, and state university must:

- Delineate courses and programs for dually enrolled home education students. Courses and programs may be added, revised, or deleted at any time.
- Identify eligibility criteria for home education student participation, not to exceed those required of other dually enrolled students.

District school boards are authorized and encouraged to establish requirements for high school graduation in excess of the minimum requirements; however, an increase in academic credit or minimum grade point average requirements cannot apply to those students enrolled in grades nine through 12 at the time the district school board increases the requirements. In addition, any increase in academic credit or minimum grade point average requirements do not apply to a student who earns credit toward the graduation requirements for equivalent courses taken through dual enrollment. Students enrolled in dual enrollment instruction may be included in calculations of full-time equivalent student memberships for basic programs for grades nine through 12 by a district school board. A student may not be enrolled in a college-credit mathematics or English course on a dual enrollment basis unless the student has demonstrated adequate precollegiate preparation on the section of the basic computation and communication skills assessment that is appropriate for successful student participation in the course. School districts and community colleges must weigh college-level dual enrollment courses the same as honors courses and AP courses when grade point averages are calculated. Alternative grade calculation or weighting systems that discriminate against dual enrollment courses are prohibited. Students who entered grade nine in the 2004-2005 school year and thereafter may select from three high school graduation options, one of which is completion of a three-year standard college preparatory program, requiring successful completion of a minimum of 18 academic credits in grades nine through 12. At least six of the 18 credits required for completion of this program must be received in classes that are specifically listed or identified by the department of education as honors, dual enrollment, AP, IB, or Advanced International Certificate of Education. Home education students may participate in dual enrollment. The department of education developed, coordinated, and maintained a statewide course numbering system for postsecondary and dual enrollment education in school districts, public postsecondary educational institutions, and participating nonpublic postsecondary educational institutions. When calculating the grade point average to be used in determining initial eligibility for a Bright Futures Scholarship, the department of education weights dual enrollment courses. By statute, each teacher preparation program, each postsecondary educational institution providing dual enrollment or other acceleration programs, each district school board, and each district and school-based administrator fully supports and cooperates in the accomplishment of the purposes and guiding principles of the Better Education Students and Teachers (BEST) Florida Teaching Program. Each joint dual enrollment and AP course must be incorporated within and subject to the provisions of the district interinstitutional articulation agreement, which must

be completed before high school registration for the fall term of the following school year. This agreement must certify that each joint dual enrollment and AP course integrates, at a minimum, the course structure recommended by the College Board and the structure that corresponds to the common course number. It also must include:

- A delineation of courses and programs available to students eligible to participate in dual enrollment along with a plan for the community college to provide guidance services to participating students on the selection of courses.
- A delineation of the process by which students and their parents are informed about opportunities to participate in articulated acceleration programs.
- A delineation of the process by which students and their parents exercise their option to participate in an articulated acceleration program.
- A delineation of high school credits earned for completion of each dual enrollment course.
- A provision for postsecondary courses that meet the criteria for inclusion in a district articulated acceleration program to be counted toward meeting graduation requirements.
- An identification of eligibility criteria for student participation in dual enrollment courses and programs.
- A delineation of institutional responsibilities regarding student screening prior to enrollment and monitoring student performance subsequent to enrollment in dual enrollment courses and programs.
- An identification of the criteria by which the quality of dual enrollment courses and programs are to be judged and a delineation of institutional responsibilities for the maintenance of instructional quality.
- A delineation of institutional responsibilities for assuming the cost of dual enrollment courses and programs, including instructional materials.
- An identification of responsibility for providing student transportation if the dual enrollment instruction is conducted at a facility other than the high school campus.
- A delineation of the process for converting college credit hours earned through dual enrollment and early admission programs to high school credit, based on mastery of course outcomes, as determined by the department of education

The state board of education determines the number of postsecondary credit hours earned through dual enrollment that satisfy the requirements of a district's interinstitutional articulation agreement and that equal one full credit of the equivalent high school course.

Each student enrolled in a joint dual enrollment and AP course may be funded according to either the dual enrollment or AP formula; however, no student can be funded through both programs for enrollment in a course. The district school board reporting enrollments for such courses must utilize the funding formula that more closely approximates the cost of conducting the course. No student can be reported for AP funding who fails to meet the examination requirement for such funding. Postsecondary credit for student completion of a joint dual enrollment and AP course will be awarded, based on the stated preference of the student, as either dual enrollment or AP credit; however, an award of AP credit is limited to students who score a minimum of 3 on a five-point scale on the AP examination. No student can claim double credit based on the completion of a single joint dual enrollment and AP course, nor is any student enrolled required to complete the AP examination. Each district school board may offer controlled open enrollment or a public education delivery system that allows school districts to make student school assignments using parents' indicated preferential public school choice as a significant factor. The controlled open enrollment program is offered in addition to other existing choice programs, such as dual enrollment. Early admission is a form of dual enrollment through which eligible secondary students enroll in a postsecondary institution on a full-time basis in courses that are creditable toward the high school diploma and the associate or baccalaureate degree. Career early admission is a form of career dual enrollment through which eligible secondary students enroll full time in a career center or a community college in courses that are creditable toward the high school diploma and the certificate or associate degree. Participation in the career early admission program is limited to students who have completed a minimum of six semesters of full-time secondary enrollment, including studies undertaken in the 9th grade. Students enrolled in either type of early admission program are exempt from the payment of registration, tuition, and laboratory fees.

International Baccalaureate

(Fla. Stat. § 1002.20; Fla. Stat. § 1003.43; Fla. Stat. § 1007.22; Fla. Stat. § 1003.02; Fla. Stat. § 1002.23; Fla. Stat. § 1009.534; Fla. Stat. § 1007.27; Fla. Stat. § 1009.531; Fla. Stat. § 1009.535; Fla. Stat. § 1003.429; Fla. Stat. § 1011.62; Fla. Stat. § 1007.261)

Students who enter 9th grade may select from three high school graduation options, one of which is completion of a three-year standard college preparatory program. At least six of the credits must be received in classes that are honors, dual enrollment, AP, IB, or Advanced International Certificate of Education. According to state law, high school graduation requires successful completion of either a minimum of 24 academic credits in grades nine through 12 or an IB curriculum. State law indicates

that a value of 0.24 full-time equivalent student membership is calculated for each student enrolled in an IB course who receives a score of 4 or higher on a subject examination. A value of 0.3 full-time equivalent student membership is calculated for each student who receives an IB diploma. The school district distributes to each classroom teacher who provided IB instruction:

- A \$50 bonus for each student who receives a score of 4 or higher on the IB examination for a course taught by the IB teacher.
- An additional bonus of \$500 to each IB teacher in a school designated performance grade category “D” or “F” who has at least one student scoring 4 or higher on the IB examination, regardless of the number of classes taught or of the number of students scoring a 4 or higher.

Bonuses awarded to a teacher cannot exceed \$2,000 in any given school year. School districts must notify parents of students in or entering high school of the opportunity and benefits of IB. As part of the Family and School Partnership for Student Achievement Act, the department of education developed components of a parent guide to successful student achievement, which must include, among other things, opportunities for parents to learn about rigorous academic programs that may be available for their child, such as IB. Parents of public school students may seek whatever public school choice options that are applicable to their students and are available in their school districts. These options may include, among other things, IB. A variety of articulated acceleration mechanisms must be available for secondary and postsecondary students attending public educational institutions. Articulated acceleration is designed to shorten the time necessary for a student to complete the requirements associated with earning a high school diploma and a postsecondary degree, broaden the scope of curricular options available to students, or increase the depth of study available for a particular subject. Articulated acceleration mechanisms include, but are not limited to, the IB program. Credit earned through the Florida Virtual School provides additional opportunities for early graduation and acceleration. The levels of postsecondary education must collaborate in further developing and providing articulated programs in which students can proceed toward their educational objectives as rapidly as their circumstances permit. Time-shortened educational programs, as well as the use of acceleration mechanisms, must include, but are not limited to, the IB program. When calculating the grade point average to be used in determining initial eligibility for a Bright Futures Scholarship, the department of education weights courses identified in the course code directory as pre-IB and IB. A student is eligible for a Florida Medallion Scholars Award or the Florida Academic Scholars Award if the student meets the general eligibility requirements for the Florida Bright Futures Scholarship Program and has been home-

schooled during grades 11 and 12 or has completed the IB curriculum but failed to earn the IB diploma and has met certain other criteria.

Tech-Prep

(Fla. Stat. § 1007.235; Fla. Stat. § 1009.536; Fla. Stat. § 1007.21)

Tech-Prep students must be enrolled in articulated, sequential programs of study that include a technical component and at least a minimum of a postsecondary certificate or two-year degree. The district interinstitutional articulation agreement, which must be completed before high school registration for the fall term of the following school year, should include mechanisms and strategies for promoting Tech-Prep programs of study. The state also created charter technical career centers, which are public schools operated under a charter granted by a district school board or community college board of trustees or a consortium, in order to provide a learning environment that better serves the needs of a specific population group, thus promoting diversity and choices within the public education and public postsecondary technical education community. A student is eligible for a Florida Gold Seal Vocational Scholars Award if the student meets general eligibility requirements for the Florida Bright Futures Scholarship Program, completes the secondary school portion of a Two-Plus-Two Program or a Tech-Prep program, and meets certain other criteria.

GEORGIA*

Advanced Placement

(Ga. Code § 20-2-306; Ga. Code Ann. § 20-2-157)

State law requires the department of education to pay the fees charged to students for AP tests according to rules set by the state board of education. AP coursework grades are weighted by the Georgia Student Finance Commission in calculating the overall grade point averages for students, as long as the weighting of the course grades is uniformly applied to all students in the state taking the specified coursework.

Dual/concurrent Enrollment

(Ga. Code § 20-2-306; Ga. Code Ann. § 20-2-161.1; Ga. Code Ann. § 20-2-157; Georgia Board of Regents Policy § 402.0101-a6)

With regard to dual/concurrent enrollment, state law established a uniform reporting system to be used as one of the criteria to determine eligibility of high school students seeking enrollment in postsecondary courses. Further, to apply to an eligible institution for enrollment in selected courses, a student must be in 11th or 12th grade, enrolled in a Georgia public school, and 16 years of age or over. The high school principal and advisement faculty are responsible for informing the postsecondary institution of the academic, emotional, social, and other characteristics that should be considered in the decision to enroll or not enroll

the student. Annually, each local school system must provide general information about the program to all eligible students, and it must also provide counseling services to such students and their parents or guardians before the students enroll in eligible institutions to ensure that the students and their parents or guardians are aware of the possible consequences of enrolling in an eligible institution. A local school system must grant academic credit to a student enrolled in a postsecondary course if that course has been listed as approved by the department of education and if the student successfully completes the course. The student is responsible for requesting that the institution notify the student's local school system regarding the student's grade in that course. Secondary school credits granted for postsecondary courses count toward graduation requirements. An eligible institution that accepts a student cannot receive any state funds for that student unless the institution complies with certain requirements. The amount of funds requested by the state board for the secondary options grant account is the amount for the participating students in the local systems during the portion of the instructional day the students were actually enrolled at postsecondary institutions. The department pays to the postsecondary institutions from this grant account the lesser of the following amounts for students enrolled:

- The actual costs of tuition, materials, and fees directly related to the approved courses taken by the students.
- The amount for the students if those students had been in equivalent instructional programs in a local school system for that portion of the instructional day in which they were actually enrolled in postsecondary institutions.

A student enrolled in a postsecondary institution for secondary credit is not eligible for any other state student financial aid for courses taken through this program. Finally, University System of Georgia Board of Regents policy also addresses dual/concurrent enrollment. The system recognizes the need to provide academically talented high school students with opportunities for acceleration of their formal academic programs. Consequently, the system developed a joint enrollment program in which a student, while continuing his or her enrollment in high school as a junior or senior, enrolls in courses for college credit, as well as an early admissions program in which the student enrolls as a full-time college student following completion of the high school junior year.

International Baccalaureate

(Ga. Code Ann. § 20-2-157)

IB coursework grades are weighted by the Georgia Student Finance Commission in calculating the overall grade point averages for students, as long as the weighting of the course grades is uniformly applied

to all students in the state taking the specified coursework.

Tech-Prep

None.

HAWAII

Advanced Placement

None.

Dual/concurrent Enrollment

(HRS § 304-67.5; HRS § 302A-401)

The Running Start Program is a dual/concurrent enrollment option within the Hawaii Department of Education. It allows eligible students to enroll in any qualified vocational or academic course offered by the University of Hawaii System. There are several requirements that a student must meet in order to be eligible, including:

- Achieving a score on a placement instrument administered by the college that demonstrates the student's ability to succeed at the college level.
- Being under the age of 21 as of September 1 of the school year in which the college course is taken.
- Having other qualifications deemed appropriate by the department of education or the University of Hawaii as long as subsequent qualifications do not restrict any student from taking the placement instrument.

All postsecondary course credits successfully completed and that would otherwise be transferable are transferable to any University of Hawaii System degree-granting institution provided that the student is admitted to the campus where the credit is transferred. Courses successfully completed also satisfy the department of education's high school graduation requirements.

International Baccalaureate

None.

Tech-Prep

None.

IDAHO

Advanced Placement

(Idaho State Board of Education Governing Policies and Procedures Section III-R; Idaho State Board of Education Governing Policies and Procedures Section III-K)

The governing policies and procedures of the Idaho State Board of Education state that credit for prior learning may be granted only at the undergraduate level. Prior learning is defined as the award of credit for knowledge acquired from work and life experiences, mass media, independent reading and study, AP, the College Level Examination Program (CLEP), challenge

courses, American Council on Education approved military education or experience, and competency testing. Further, board policy encourages the use of AP tests to attract good students and encourages AP Programs for Idaho's high school students.

Dual/concurrent Enrollment

(Idaho Code §33-5106; Idaho Code § 33-5109; Idaho Code § 33-5107; Idaho Code § 33-5105; Idaho Code § 33-5104; Idaho Code § 33-5108; Idaho Code § 33-5101; Idaho Code §33-5110; Idaho Code §33-5103; Idaho Code §33-5102; Idaho Code §33-33-203)

Idaho state law indicates that dual enrollment includes the option of enrollment of K-12 students in a postsecondary institution. Credits awarded from an accredited postsecondary institution may be counted toward state board of education high school graduation requirements. As indicated by state law, the purpose of postsecondary enrollment options is to promote rigorous academic pursuits and to provide a wider variety of options to high school students by encouraging and enabling them to enroll full time or part time in postsecondary institutions. Eligible students include those in 11th or 12th grade who are not foreign exchange students. If an institution accepts a high school student for enrollment, the institution must send written notice, which includes the course and number of hours, to the student and the student's school district within 10 days of acceptance. To the extent possible, the school district must provide counseling services to students and their parents or guardians before they enroll. Further, the students and their parents or guardians must sign a form stating that they have received information about a variety of risks and consequences associated with the program. School districts must provide general information about the program to all 10th and 11th grade students, and students must notify the district of their intent to enroll, although this is not binding. The law further lays out certain limitations on participation, such as the following: a junior may not participate in the program for more than two years; and a senior may participate for no more than one year. Students may earn secondary credit, postsecondary credit, or both but must designate which they wish to earn at the time of enrollment. Finally, state law mandates that school districts may make payments or partial payments to postsecondary institutions for courses taken for secondary credit but not for courses taken for postsecondary credit only. Dual credit courses taught at the high school may be taught by a secondary teacher or postsecondary instructor and can be offered at a high school with the agreement of the school board and governing body of the postsecondary institution.

International Baccalaureate

None.

Tech-Prep

None.

ILLINOIS*

Advanced Placement

(Ill. Rev. Stat. 105 § 302/10; Ill. Rev. Stat. 105 § 302/20; Ill. Rev. Stat. 105 § 302/15)

State law specifies that, subject to appropriation, teachers who teach AP courses must obtain appropriate training, recognized by the College Board. AP and pre-AP teacher training must:

- Provide teachers with the necessary content knowledge and instructional skills to prepare students for success in AP courses and examinations and other advanced course examinations, as well as for mastery of postsecondary course content.
- Provide administrators, including principals and counselors, with professional development that will enable them to create strong and effective AP Programs in their schools.
- Provide middle grade, junior high, and high school teachers with AP vertical team training and other pre-AP professional development that prepares students for success in AP courses.
- Support the implementation of an instructional program for students in grades six through 12 that provides an integrated set of instructional materials, diagnostic assessments, and teacher professional development in reading, writing, and mathematics that prepares all students for enrollment and success in AP courses and in college.

The state board of education must encourage school districts to offer rigorous courses in grades six through 11 that prepare students for AP coursework. The state board of education must also encourage school districts to make it a goal that all 10th graders take the Preliminary SAT/National Merit Scholars Qualifying Test (PSAT/NMSQT), so that test results will provide each high school with a database of student assessment information that guidance counselors and teachers can use to identify students who are prepared or who need additional work to be prepared to enroll and be successful in AP courses, using a research-based AP identification program provided by the College Board. The state board of education must also:

- Seek federal funding through the Advanced Placement Incentive Program and the Math-Science Partnership Program and use it to support AP and pre-AP teacher professional development and to support the implementation of an integrated instructional program for students in grades six through 12 in reading, writing, and mathematics that prepares all students for enrollment and success in AP courses and in college.
- Focus state and federal funding with the intent to carry out activities that target school districts serving high concentrations of low-income students.

- Subject to appropriation, provide a plan of communication that includes, without limitation, disseminating to parents materials that emphasize the importance of AP or other advanced courses to a student's ability to gain access to and to succeed in postsecondary education; and materials that emphasize the importance of the PSAT/NMSQT, which provides diagnostic feedback on skills and relates student scores to the probability of success in AP courses and examinations. This information must also be disseminated to students, teachers, counselors, administrators, school districts, public community colleges, and state universities.
- Subject to appropriation, annually evaluate the impact of this law on rates of student enrollment and success in AP courses, on high school graduation rates, and on college enrollment rates.

Dual/concurrent Enrollment

None.

International Baccalaureate

None.

Tech-Prep

(Ill. Rev. Stat. 105 § 5/2-3.115; Ill. Rev. Stat. 35 § 5/209)

The Illinois state legislature encouraged the state superintendent of education to establish a program of academic credit for Tech-Prep work-based learning for high school students with an interest in pursuing such career training. Any school district seeking to provide its secondary school students with an opportunity to participate in Tech-Prep work-based learning programs may institute the program. The state board of education may make grants, subject to appropriations, to school districts to be used for Tech-Prep Partnership for Careers Programs. The state board of education may use a portion of the funds appropriated for the program to promote its availability and successes with school districts, businesses, and communities. State law also provides for a tax credit for cooperative secondary school youth vocational programs that are certified as qualifying Tech-Prep programs because the programs prepare student to be technically skilled workers and meet the performance standards of business and industry and the admission standards of higher education.

INDIANA*

Advanced Placement

(Ind. Code § 20-10.1-22.2-4; Ind. Code § 20-10.1-22.2-10; Ind. Code § 20-1-21-9; Ind. Code § 20-10.1-22.2-8; Ind. Code § 20-10.1-22.2-7; Ind. Code § 20-10.1-22.2-6; Ind. Code § 20-10.1-22.2-5; Ind. Code § 20-10.1-22.2-3; Ind. Code § 20-10.1-22.2-2; Ind. Code § 20-10.1-22.2-1; Ind. Code § 20-10.1-4.4-4; Ind. Code § 20-10.1-22.2-11; Ind. Code § 20-10.1-4.4-10)

State law requires that the "School Corporation Annual Performance Report" must include information about

AP, including the percentage of students taking the test and the percentage of students scoring 3, 4, and 5. The state established the Advanced Placement Program to encourage students to pursue advanced courses, particularly in math and science. Each student who enrolls in an advanced course may take the AP examination to receive high school credit. If a student who takes an AP examination receives a satisfactory score, the student is entitled to receive a certificate of achievement for the subject area of the exam. Teachers who are assigned to teach an AP course may participate in summer training institutes offered by the College Board. Money appropriated to the department of education to implement the program is distributed for the following purposes, in the following order:

- To pay the fees for each math or science AP examination that is taken by an Indiana resident who is enrolled in a public secondary school.
- To pay stipends for teachers assigned to teach an advanced course in math or science.
- To pay school corporations (high schools) for instructional materials needed for the advanced courses in math or science.
- To purchase or rent equipment that a school corporation may need to develop an advanced course in math or science.

Each state postsecondary institution must work with the department of education in the development of a policy of granting academic credit and AP to students who attend the state postsecondary institution and who receive a satisfactory score as determined by the postsecondary institution on the AP examination.

Dual/concurrent Enrollment

(Ind. Code § 20-10.1-15 (1-19))

Indiana's Postsecondary Enrollment Program is designed for students in grades 11 and 12. If a course has been approved for secondary credit by the school corporation, a student is entitled to credit toward graduation requirements for each course that the student successfully completes at the postsecondary institution. Each year, the school corporations must provide each student in grades 10 and 11 with information about the program. Each student who intends to participate must notify the principal of his or her high school. A representative of the school corporation must meet with each student who intends to participate in the program and discuss the following:

- The student's eligibility to participate in the program.
- The courses in which the student is authorized to enroll.
- The postsecondary credit the student earns upon successful completion of a course.
- The consequences of a student's failure to successfully complete a course.

- The student’s schedule.
- The financial obligations of the student and the school under the program.
- The responsibilities of the student, the student’s parent or guardian, and the school under the program.
- Other matters concerning the program.

Postsecondary institutions may accept or reject a student’s application for enrollment based on the standards ordinarily used to decide student enrollments. A participating student is considered to be enrolled in the school corporation in computing average daily membership. Upon demonstration of financial need, an institution may grant financial assistance to a student accepted for admission. A postsecondary enrollment program fund was established to provide financial assistance to students in the program. The fund consists of appropriations made by the Indiana General Assembly and gifts. A school corporation must grant secondary credit for a course successfully completed by a student at an institution if the course was approved by the school corporation. If a student enrolls in an institution after graduation from secondary school, the institution will award postsecondary credit for a course successfully completed at that institution. At the end of each school year, each school corporation must submit to the department of education a list of the students who are enrolled in the program and a list of the courses successfully completed by each student in the program. Further, for each student enrolled in the program, each school corporation must make and maintain records of the following:

- The courses and credits hours in which the student enrolls.
- The courses that the student successfully completes and fails to complete.
- The secondary credit granted to the student.
- Other information requested by the department of education.

International Baccalaureate

None.

Tech-Prep

None.

IOWA

Advanced Placement

(Iowa Code § 263.8C)

State law established a summer program at the University of Iowa to train high school AP teachers and to provide intensive coursework for secondary students.

Dual/concurrent Enrollment

(Iowa Code § 257.6; Iowa Code § 261C.9; Iowa Code

§ 261C.8; Iowa Code § 261C.7; Iowa Code § 261C.6; Iowa Code § 261C.5; Iowa Code § 261C.4; Iowa Code § 261C.3; Iowa Code § 261C.2)

Iowa’s Postsecondary Enrollment Options Act (PSEO) was enacted to promote rigorous academic pursuits and to provide a wider variety of options to high school students. It enables 11th and 12th grade students, along with 9th and 10th grade students identified as gifted and talented to enroll part time in college credit courses offered by two- and four-year colleges. A comparable course, as defined by a rule made by the board of directors of the public school district, must not be offered by the school district or the accredited non-public school district that the student attends. If an eligible institution accepts a high school student for enrollment, the institution must send written notice to the student, the district, and the Iowa Department of Education. This notice must list the course, the clock hours, and the number of hours of postsecondary or vocational-technical credit that the student will receive upon successful completion of the course. If a student successfully completes a postsecondary course, he or she will be granted secondary credit, and the credit will appear on his or her transcript. This credit counts toward high school graduation requirements. Further, a student may take and receive credit for up to seven semester hours of credit during the summer if the student pays the cost of attendance. The PSEO legislation stipulates a funding arrangement: high schools must pay the partnering college an amount not to exceed \$250 for college tuition, textbooks, and fees. Students must reimburse the district if they do not complete or successfully pass the course. Since the inception of this program, increasingly the postsecondary institutions report that the \$250 fails to cover all of the college’s costs of offering courses to high school students, yet no additional tuition or fees can be collected from the students or the high school. The maximum payment of \$250 for each high school student involved under the PSEO legislation, in most cases, is insufficient to cover all costs associated with the program. Hence, supplemental weighted funding was created to allow local school districts to receive additional state funding (1.48 funding) for high school students enrolled in community college courses. This funding stream is critical to the growth and sustainability of dual enrollment of high school students in community colleges. To qualify for supplemental weighted funding, the local school district must verify that the specified community college courses meet seven criteria. They must:

1. Supplement, not supplant, high school courses.
2. Be included in the community college catalog or an amendment or addendum to the catalog.
3. Be open to all registered community college students, not just high school students.

4. Be eligible for college credit, and the credit must apply toward an associate of arts, associate of science, associate of applied arts, or associate of applied science degree or toward completion of a college diploma program.
5. Be taught by a teacher meeting community college licensing requirements.
6. Be taught utilizing the community college course syllabus.
7. Be of the same quality as a course offered on a community college campus.

The state policy for supplemental weighted funding has led to an increase in the number of contractual agreements between high schools and community colleges for the provision of college credit classes to high school students. The most recent public policy supporting dual enrollment was legislation passed in 2002 for the development and implementation of career academies or programs of study that combine a minimum of two years of secondary education with a postsecondary career preparatory program in a nonduplicative, sequential course of study that is standards-based; integrates academic and technical instruction; incorporates work-based and worksite learning, where appropriate and available; uses an individualized career-planning process that involves parents; and leads to an associate degree or postsecondary diploma or certificate in a rewarding, high-skill career field. Several funding streams are available to support career academies. The Iowa Department of Education's approval process for secondary vocational education programs requires documentation of articulation with the community college.

International Baccalaureate

None.

Tech-Prep

None.

KANSAS

Advanced Placement

None.

Dual/concurrent Enrollment

(Kansas Board of Regents Policy Ch. IV-8)

The Kansas Legislature declared that secondary school students should be challenged continuously in order to maintain their interests in the pursuit of education and skills critical to success in the modern world. As a result, they passed the Kansas Challenge to Secondary School Pupils Act, which allows school districts to cooperate with postsecondary institutions to provide students with postsecondary education opportunities in the form of concurrent enrollment. To be a concurrent enrollment student in Kansas, a person

must be enrolled in grades 11 or 12, demonstrate the ability to benefit from participation, be authorized by the school principal to apply at the postsecondary institution, and be acceptable to or accepted at the postsecondary institution. Agreements between the school district and postsecondary institution must include, but are not limited to: the academic credit to be granted, in terms of whether the credit qualifies as college credit or college credit and high school credit; the requirement that coursework qualify as credit applicable toward a degree or certificate; and the requirement that the student pay the negotiated amount of tuition. Concurrent enrollment students who satisfactorily complete coursework at an eligible institution are granted credit toward high school graduation. Further, students are responsible for tuition and transportation to the college or university. Consistent with state law, the Kansas Board of Regents specifically encourages high school students to take advantage of postsecondary education opportunities by enrolling in postsecondary courses while still in high school or participating in home schooling. The systemwide purposes of concurrent enrollment are to develop seamlessness in the Regents' System, enhance efficiency, challenge high school students and promote college-level success, and foster improved relationships between the Regents' System and Kansas secondary schools. Kansas Board of Regents' policy further defines specific requirements for school district/postsecondary institution agreements, curriculum standards, faculty/instructors, student eligibility, credit, accountability, and reporting.

International Baccalaureate

None.

Tech-Prep

None.

KENTUCKY

Advanced Placement

(Ky. Rev. Stat. § 164.580; Ky. Rev. Stat. § 164.098; Ky. Rev. Stat. § 164.002; Ky. Rev. Stat. § 160.348; Ky. Rev. Stat. § 7.410; Ky. Rev. Stat. § 158.622; Ky. Rev. Stat. § 158.007)

The Kentucky Board of Education was charged with promulgating administrative regulations establishing the criteria a school must meet in order to designate a course an AP course, including content and program standards concerning student admission criteria, data collection, and reporting. Further, upon receipt of adequate federal funding, the Kentucky Department of Education was to:

- Expand AP teacher training institutes, including offering AP teacher training instruction and assistance through the Kentucky Virtual High School or in conjunction with the Council on Postsecondary Education through the Kentucky Virtual University.

- Establish that teachers planning to participate in AP teacher training must agree to teach at least one AP course in a Kentucky public school or the Kentucky Virtual High School.
- Develop the Kentucky Virtual Advanced Placement Academy, which must offer school districts and their students access to a core AP curriculum through the Kentucky Virtual High School.
- Identify, in conjunction with the Council on Postsecondary Education, resources at the secondary and postsecondary levels that can be directed toward AP or dual enrollment instruction.
- Compare the costs of offering AP courses through traditional on-site instruction, the Kentucky Virtual High School, and other methods and offer assistance to each school district, if requested, in analyzing how the school district can most cost effectively offer the largest number of AP courses.
- Identify current and future funding sources for AP or dual enrollment instructional programs and the amount of funds available or anticipated from those sources.
- Submit a report to the Kentucky General Assembly outlining compliance with the law.

School districts are required to accept for credit toward graduation and completion of high school course requirements an AP, high school equivalent, or Kentucky Virtual High School course taken by a student in grades five, six, seven, or eight if that student performs at levels expected of high school students, as determined by achieving a score of 3 or better on the AP examination or a B or better in a high school equivalent or a Kentucky Virtual High School course. Further, the Office of Education Accountability must conduct studies, analyze, verify, and validate the state assessment program through other external indicators of academic progress, including, but not limited to, participation in the AP Program. Each secondary school-based decision-making council must offer a core curriculum of AP, IB, dual enrollment, or dual credit courses, using on-site instruction or electronic instruction through the Kentucky Virtual High School or other online alternatives. Further, each secondary school-based decision-making council must establish a policy on the recruitment and assignment of students to AP, IB, dual enrollment, and dual credit courses that recognizes that all students have the right to be academically challenged and should be encouraged to participate in these courses. State law also requires the Council on Postsecondary Education to promulgate administrative regulations requiring public postsecondary educational institutions to grant credit toward graduation to a student who scores at least a 3 on an AP examination. The council also must publish information about the scores required on the AP examinations for which credit toward graduation and completion of degree requirements

will be granted at all Kentucky public and private postsecondary institutions. State law also requires the Kentucky Community and Technical College System to be responsive to the needs of students and employers in all regions with accessible education and training to support the lifelong learning needs of Kentucky citizens in order to enhance the relationship between secondary education and postsecondary programs through such programs as AP.

Dual/concurrent Enrollment

(Ky. Rev. Stat. § 160.348; Ky. Rev. Stat. § 164.580; Ky. Rev. Stat. § 164.098; Ky. Rev. Stat. § 164.002; Ky. Rev. Stat. § 158.622; Ky. Rev. Stat. § 158.007)

Each secondary school-based decision-making council must offer a core curriculum of AP, IB, dual enrollment, or dual credit courses, using on-site instruction or electronic instruction through the Kentucky Virtual High School or other online alternatives. Further, each secondary school-based decision-making council must establish a policy on the recruitment and assignment of students to AP, IB, dual enrollment, and dual credit courses that recognizes that all students have the right to be academically challenged and should be encouraged to participate in these courses. Finally, the council must develop guidelines for content knowledge and teacher training in dual enrollment and dual credit programs. To this end, the council has conducted a study of the effects of dual enrollment on postsecondary enrollment and persistence. It is also conducting a statewide survey of the policies and practices of dual enrollment and dual credit in order to make a comprehensive set of policy recommendations, through the state P-16 Council, regarding an array of issues involved in dual enrollment and dual credit, including teacher preparation. State law also requires the Kentucky Community and Technical College System to be responsive to the needs of students and employers in all regions with accessible education and training to support the lifelong learning needs of Kentucky citizens in order to enhance the relationship between secondary education and postsecondary programs, including such programs as dual enrollment.

International Baccalaureate

(Ky. Rev. Stat. § 158.007; Ky. Rev. Stat. § 160.348)

Each secondary school-based decision-making council must offer a core curriculum of AP, IB, dual enrollment, or dual credit courses, using on-site instruction or electronic instruction through the Kentucky Virtual High School or other online alternatives. Further, each secondary school-based decision-making council must establish a policy on the recruitment and assignment of students to AP, IB, dual enrollment, and dual credit courses that recognizes that all students have the right to be academically challenged and should be encouraged to participate in these courses.

Tech-Prep

(Ky. Rev. Stat. § 158.760; Ky. Rev. Stat. § 158.7603)

With respect to Tech-Prep, the General Assembly established a School-to-Careers System that serves as an umbrella for career-related programs in the public schools, including School-to-Work, Tech-Prep, and High Schools That Work initiatives. The School-to-Careers Grant Program provides matching funds to school districts or consortia of school districts for the development and implementation of comprehensive plans that include several specifically outlined aspects. The grant funds may be used to enhance ongoing efforts, such as Tech-Prep.

LOUISIANA*

Advanced Placement

(La. Rev. Stat. Ann. § 17:3048.1; La. Rev. Stat. Ann. § 1945; La. Rev. Stat. Ann. § 3911)

According to state law, beginning at age 14, a student's individualized education program (IEP) must include a statement of the transition service needs of the child under the applicable components of the child's IEP that focus on the child's courses of study (such as participation in AP courses or a vocational education program). In addition, the department of education established a standardized data collection and analysis system that includes regular collection of information on the number of students in AP courses. Finally, a student is eligible for a performance award as part of the Louisiana Tuition Opportunity Program for Students (TOPS), provided that the student meets a number of requirements, including achieving a minimum cumulative high school grade point average of 3.0 on a 4.0 scale, when calculated in accordance with applicable rules adopted by the administering agency and when the calculation is based on 10 or more of the grades being grades for honors curriculum courses, gifted curriculum courses, AP courses, or any combination of those courses, and when the high school awards grades for those courses on a 4.0 scale or higher.

Dual/concurrent Enrollment

None.

International Baccalaureate

None.

Tech-Prep

None.

MAINE

Advanced Placement

None.

Dual/concurrent Enrollment

(ME Rev. Stat. 20-A §4771- 4775)

Maine statute provides guidelines for postsecondary enrollment for high school students. To be eligible to participate in the program, the student must have at least a 3.0 grade point average on a 4.0 scale or

equivalent; have taken specified course prerequisites; and receive school and parental approval. If the student does not meet these requirements, the student may be eligible if he or she is a junior or senior; receives a recommendation from a school administrator following an assessment; and has been approved by the postsecondary institution. Finally, the eligible receiving institution must have space for the student. The high school may grant academic credit toward a high school diploma, but the postsecondary institution must grant full credit to any student who successfully completes a course. The state department of education pays 50 percent of the in-state tuition for the student's first three credit hours taken each semester and up to six credit hours per academic year. The postsecondary institution may not make any additional tuition charges for the course but may impose fees and charges.

International Baccalaureate

None.

Tech-Prep

None.

MARYLAND

Advanced Placement

None.

Dual/concurrent Enrollment

(Md. Education Code Ann. § 18-1401)

State law states that a student enrolled in both a secondary school and an institution of higher education is considered part time. Further, each institution of higher education that participates in the Part-Time Grant Program, a program for undergraduate part-time students, must establish criteria for awarding a grant or a waiver to dually enrolled students.

International Baccalaureate

None.

Tech-Prep

None.

MASSACHUSETTS*

Advanced Placement

(Mass. Gen. Laws Ann. 12 § 69, Section 1D)

State law requires the board of education to create a grant program that awards grants to school districts for the costs associated with establishing AP courses.

Dual/concurrent Enrollment

(Mass. Gen. Laws Ann. 2 § 15A, Section 39)

A qualified student enrolled in a public secondary school may enroll in a public institution of higher education. The student earns both secondary school and college credits and may enroll either full time or for individual courses. The board of education, in consultation with the board of higher education, defines which students qualify for this program,

establishes criteria for admission, and otherwise administers this program. Students in nonpublic schools are eligible to participate in the program, provided the crediting of such attendance for the purpose of receiving a high school diploma is at the sole discretion of the nonpublic school. Although this statute still exists on record, the legislature has not provided funding for the program in about four years.

International Baccalaureate

None.

Tech-Prep

None.

MICHIGAN

Advanced Placement

None.

Dual/concurrent Enrollment

(Mich. Comp. Laws § 388.511- 524; Mich. Comp. Laws § 380.1481; Mich. Comp. Laws § 388.1698)

Passed in 1996, Michigan's Postsecondary Enrollment Act was created to provide a wider variety of options to high school students by encouraging and enabling qualified students to enroll in courses or programs in eligible postsecondary institutions. The school district supports the students by paying their tuition and fees. Students attend classes on campus and can earn high school credit, college credit, or both. The high school credits count toward high school graduation. The superintendent of public instruction approved the ACT as the readiness assessment to determine eligibility beginning with participation in the 2006-2007 school year. The school district must provide an eligibility letter to the student, signed by the principal. Within a reasonable time after registration, the postsecondary institution must send written notice to the student and his or her school district. Each school district must provide information to all high school students on the postsecondary enrollment options, including enrollment eligibility, institutions, and types of courses that are eligible; the decision-making process for granting academic credits; an explanation of charges that will be paid by the school district and of financial arrangements for paying costs not covered by the school district; and other specific information items. To the extent possible, a school district also must provide counseling services that ensure that the student and his or her parent or guardian understand the benefits, risks, and possible consequences of participating in the program. Further, the student and his or her parent or guardian must file with the postsecondary institution a signed form stating that they received this information prior to enrollment. The school district pays the postsecondary institution on behalf of the student an amount equal to the eligible charges or the prorated percentage of the state portion of the foundation allowance paid on behalf of the student, whichever is less. The student is not considered less than full time

in his or her district solely because of the effect of the student's postsecondary enrollment. The school district is not responsible for transportation or parking costs associated with participation in this program. Finally, each intermediate school district must collect annually from each school district information on:

- The amount of money expended for payments required under this program.
- The number of eligible students who were enrolled in the school district and the number who enrolled in one or more postsecondary courses and received payment, both in aggregate and by grade level.
- The percentage of the school district's enrollment represented by the eligible students, both in aggregate and by grade level.
- The total number of postsecondary courses for which the school district made payment; the number of courses for which postsecondary credit was granted; the number of those courses for which high school credit was granted; and the number of those courses that were not completed by the student.

Michigan also has a virtual university, which operates the Michigan Virtual High School. Under state law, the Michigan Virtual High School must act as a broker for college-level equivalent courses and dual enrollment courses from postsecondary education institutions. State law explicitly says that the Michigan Virtual High School must offer dual enrollment opportunities.

International Baccalaureate

None.

Tech-Prep

None.

MINNESOTA*

Advanced Placement

(Minn. Stat. § 120B.13; Minn. Stat. § 120B.14; Board of Trustees MN State Colleges and Universities - POLICY 3.15; Board of Trustees MN State Colleges and Universities - POLICY 3.16)

Minnesota statute states that the AP Program is a well-established academic program for mature, academically directed high school students. A district must grant academic credit to a student attending an accelerated or advanced academic course offered by a higher education institution or a nonprofit public agency other than the district if the student successfully completes the course and passes an examination by the district. If no comparable course is offered by the district, the commissioner determines the number of credits that will be granted to a student. The state may pay all or part of the fee for examinations associated with these programs for students of low-income families in public and nonpublic schools. Minnesota State Colleges and

Universities Board policies establish common practices among all Minnesota postsecondary institutions for awarding credit based on student performance on AP examinations. Specifically, a score of 3 is the minimum for postsecondary credit awards; the same amount of credit is granted for scores 3, 4, and 5, except in certain situations; credit is given for a specific college course if a test covers substantially similar material; students are allowed to petition for electives to meet certain general education requirements; and no college or university can limit the total number of credits a student can earn through AP courses and tests.

Dual/concurrent Enrollment

(Minn. Stat. § 120B.14; Minn. Stat. § 135A.101; Minn. Stat. § 124D.09; Board of Trustees MN State Colleges and Universities - POLICY 3.5)

The Postsecondary Enrollment Options Act is designed to promote rigorous academic pursuits and to provide a wider variety of options to high school students by encouraging and enabling secondary students to enroll full time or part time in college or university programs. Students who first enroll in grade 11 may not enroll in postsecondary courses for secondary credit for more than the equivalent of two academic years. Schools or school districts must provide counseling services to students and their parents or guardians before the students enroll in courses to the extent possible. Students may enroll in a course for either secondary credit or postsecondary credit and must designate which at the time of enrollment. The department must not make payments to a school district or postsecondary institution for a course taken for postsecondary credit only. Students or their parents may apply to the school district for reimbursement for transportation expenses. To participate in the postsecondary enrollment options program, a college or university may provide information about its programs to a secondary school, student, or parent but may not recruit or solicit participation on financial grounds. Postsecondary institutions may not enroll secondary students for developmental courses. Finally, board policy specifies admission requirements for the postsecondary enrollment options programs that are more specific than state law. Students must provide evidence of the ability to do college work in the form of (for juniors) class rank in the upper one-third of their class or a score at or above the 70th percentile on a national, standardized, norm-referenced test; or (for seniors) class rank in the upper one-half of their class or a score at or above the 50th percentile on a national, standardized, norm-referenced test; and (for juniors and seniors) documentation other than the above that demonstrates the student's readiness and ability.

International Baccalaureate

(Minn. Stat. § 120B.13; Board of Trustees MN State Colleges and Universities - POLICY 3.16)

Minnesota statute states that the IB program is a well-established academic program for mature,

academically directed high school students. A district must grant academic credit to a student attending an accelerated or advanced academic course offered by a higher education institution or a nonprofit public agency other than the district if the student successfully completes the course and passes an examination by the district. If no comparable course is offered by the district, the commissioner determines the number of credits that will be granted to a student. The state may pay all or part of the fee for examinations associated with these programs for students of low-income families in public and nonpublic schools. Minnesota State Colleges and Universities Board policy establishes common practices for awarding credit to students who have completed an IB diploma in high school. Specifically, students who complete an IB diploma with a score of 30 or higher must be offered 12 quarter or eight semester credits for each of three higher-level examinations, plus three quarter or two semester credits for each of the subsidiary exams, for a total of 45 quarter or 30 semester credits; credits are transcribed according to the same rules as those used for AP exams; no credit is given for subsidiary-level exams other than those included as part of the IB diploma, but students may receive credits for any higher level exams with a score of 5 or higher.

Tech-Prep

None.

MISSISSIPPI

Advanced Placement

None.

Dual/concurrent Enrollment

(Miss. Code Ann. § 37-29-1; Miss. Code Ann. § 37-101-28; Miss. Code Ann. § 37-15-37)

State law allows the Mississippi Board of Trustees of State Institutions of Higher Learning, the State Board for Community and Junior Colleges, and the state board of education to enter into a systemwide articulation agreement providing for the transfer of appropriate credits earned by qualified high school students enrolled in dual enrollment programs from the various state institutions of higher learning and community and junior colleges. Local school boards of public school districts and the Board of Trustees of State Institutions of Higher Learning also may establish a dual enrollment program under which students meeting the requirements may enroll in an institution of higher learning while they are still in high school. The students should have:

- Completed a minimum of 14 core high school units.
- Have at least a 2.5 grade point average on a 4.0 scale for all high school courses.
- Have an unconditional written recommendation from their high school principal or guidance counselor.

Students may be considered if they have not completed all of the course requirements but have earned a minimum score of 30 on the ACT test or the equivalent on the SAT test and have the required GPA and recommendation, as noted. In addition, the boards of trustees of the community and junior college districts are authorized to establish a dual enrollment program. State law also established recommended requirements for participation at a community or junior college, which are the same as listed above, except that the minimum grade point average is a 3.0 on a 4.0 scale. Tuition and costs for university-level courses must be paid from grants, foundation, or other private sources, and must be paid directly to the participating university. Students must be counted for adequate education program funding purposes in the average daily attendance of the public school district in which they attend high school. Transportation costs are the responsibility of the student's parent or legal guardian but may be paid from other private sources. Grades and college credits earned for these courses are recorded on the college transcript at the university where the student attends classes and may be transferred or used for college graduation requirements only after the student has received his or her high school diploma.

International Baccalaureate (Miss. Code Ann. § 37-106-29)

The state implemented the Resident Tuition Assistance Grant Program for full-time freshmen, sophomore, junior, and senior Mississippi residents who meet the general requirements for student eligibility, including acceptance for enrollment at any state institution of higher learning, public community or junior college, or regionally accredited, state-approved, nonprofit two-year or four-year college in the state; completion of the IB program; and an ACT score of 15.

Tech-Prep (Miss. Code Ann. § 37-151-25)

Mississippi law created the Tech-Prep Fund for implementation of Tech-Prep programs in grades seven through 12 and in the public community and junior colleges in the state.

MISSOURI

Advanced Placement (Mo. Rev. Stat. § 160.264)

The Incentives for School Excellence Program is designed to promote and encourage all local school district initiatives for excellence in education. The incentives for the program include a matching fund program. Program topics suitable for obtaining matching funds may include, among other things, AP Programs.

Dual/concurrent Enrollment None.

International Baccalaureate None.

Tech-Prep None.

MONTANA

Advanced Placement (Mont. Code Ann. § 20-32-102)

Montana state law requires the commissioner of higher education and the units of the Montana University System to cooperate with one another to offer AP courses, teacher in-service training, and other instruction through the network.

Dual/concurrent Enrollment (Mont. Code Ann. 20-9-706)

With respect to dual/concurrent enrollment, Montana established a Running Start Program that allows 11th and 12th grade high school students to attend classes at the postsecondary institution and obtain credits in classes not available through the school district. The cost for participation is determined by an interlocal agreement, which is entered into by school districts and postsecondary institutions. Interlocal agreements must state the amount for each credit to be paid to the postsecondary institution by the district or student. To participate in the program, a student must complete a Running Start application, provided by the district, and the district must determine whether the student has the skills needed to succeed in the proposed college coursework. If accepted, a student may earn both high school and college credits, as determined by the interlocal agreement. In registering 11th and 12th grade students for the program, a postsecondary institution may not displace adult students in attendance. The student is responsible for transportation, books, and all supplies. Finally, if a student is accepted into the program and drops out of a class during the drop period established by the postsecondary institution, the postsecondary institution must reimburse the district or the student the cost associated with the student's credits, as determined by the interlocal agreement.

International Baccalaureate None.

Tech-Prep None.

NEBRASKA

Advanced Placement

In 2004, the state board of education released a policy document, *Providing Equitable Opportunities for an Essential Education: For All Students in Nebraska Public School Districts*. It recommends that all high school students have the opportunity to participate in courses that offer an enriched, extended curriculum,

such as that provided by AP courses, in the subject areas of language arts, mathematics, and science. In addition, board policy states that dual enrollment program participants are tracked following graduation through postsecondary experiences, when possible. Tracking elements may include district data (e.g., class rank; GPA; ACT, where available; AP exam scores, where available and appropriate; and course outcomes and grade) and postsecondary data (e.g., GPA, major, number of hours completed, and enhancements, if appropriate to the program).

Dual/concurrent Enrollment

The Coordinating Commission for Postsecondary Education recently adopted dual enrollment standards, which are voluntary guidelines for dual credit programs offered by postsecondary institutions in Nebraska high schools. They relate to student eligibility, faculty qualifications, curriculum, assessment, and financing. The standards state that dual enrollment programs are intended to meet the needs of academically advanced students; to provide enrichment for students who have special, academic, or vocational needs; or to provide technical education. Dual enrollment programs and dual credit students are distinguished from concurrent enrollment programs and concurrently enrolled students. Dual credit students are high school students who take a course for both college and high school credit. High schools count these students in their average daily attendance. Concurrently enrolled students are high school students who take college courses for college credit only (no high school credit), while remaining enrolled in high school and counted in their school's average daily attendance. The participating high schools and postsecondary institutions determine eligibility for the program, but eligible students typically are juniors or seniors; meet the prerequisites of the course or otherwise demonstrate the ability to achieve success in the course; or are formally identified as high ability or gifted students by the school participating in the dual enrollment program. Students must complete a dual enrollment application signed by a high school official. The postsecondary institutions have the following recommended academic guidelines to increase students' opportunity for academic success. Eligible students will typically meet at least one of the following qualifications:

- Have attained a GPA of 3.0 or better.
- Earned an ACT composite score of at least 20 or an equivalent score on another valid assessment.
- Earned an ACT subscore of at least 20 or equivalent on another valid assessment relevant to the offered dual enrollment course or courses.
- Ranked in the upper one-half of their high school class.

- Demonstrated through some alternative means the capacity for academic success in the desired course or courses.

Eligible students are provided with appropriate course materials. They receive guidance regarding their program responsibilities, weighted credit options, if any, and specific grading practices. Institutions provide participating students with information clearly describing institutional procedures for academic credit transfer. Institutions are encouraged to provide the Coordinating Commission for Postsecondary Education with information or website links describing institutional credit transfer policies and procedures so that the commission can maintain a Nebraska dual enrollment website. Instructors must meet approved requirements for teaching at the department/college level. High school and postsecondary faculty must receive appropriate orientation and training. Collaboration between high school and postsecondary faculty is encouraged, and faculty development is available, where appropriate. Courses must reflect college-level experiences and rigor, as well as district and state standards and practices; and course outlines or syllabi utilized in the program must meet district, state, and college/university standards. Assessment policies and procedures are consistent with district and college/university practice. To assure the academic rigor of courses for which college credit will be awarded, universities or colleges participating in dual enrollment programs will include valid student and faculty assessment measures that are consistent with the typical assessment measures of such a university or college. Jointly developed assessment policies and procedures of K-12 schools and postsecondary education institutions should be designed to align dual enrollment curricula with state course content standards. The district and college/university review the program on an annual basis. Program participants are tracked following graduation through postsecondary experiences, when possible. Tracking elements may include district data (e.g., class rank; GPA; ACT, where available; AP exam scores, where available and appropriate; and course outcomes and grade) and postsecondary data (e.g., GPA, major, number of hours completed, and enhancements, if appropriate to the program). School districts and postsecondary education institutions are directed to work together to ensure broad access to dual enrollment courses for all students, irrespective of the students' financial resources. Postsecondary education institutions are encouraged to offer tuition remissions or find other means of support for eligible students qualifying for free or reduced-price lunches or otherwise demonstrating financial need. School districts that receive state aid related in part to significant numbers of students challenged by poverty or English-language limitations should consider using such aid or finding other means of support to fund the tuition expenses

of eligible students who would not otherwise be able to enroll in dual enrollment courses. Students may be charged tuition by the college for college credit. If dual enrollment arrangements between schools and colleges make it impossible or very difficult for a student to take a course as a high school course only, such arrangements might be considered a violation of the Student Fee Authorization Act. Further, the state board of education policy document *Providing Equitable Opportunities for An Essential Education: For All Students in Nebraska Public School Districts* recommends that all high school students have the opportunity to participate in courses that offer an enriched, extended curriculum, such as that provided by dual credit courses between secondary and postsecondary schools.

International Baccalaureate
None.

Tech-Prep

(Neb. Rev. Stat. § 79-11,137)

Nebraska Tech-Prep articulation has primary and secondary objectives. The primary objective is to prepare secondary students to enter the postsecondary component of their program of study remediation free. The secondary objective is to create AP or dual credit options that provide opportunities for students to earn postsecondary credit while enrolled in the secondary component of the program. Through state statute, Nebraska created the Seamless Delivery System Pilot Project, which initiated an instructional program between community colleges and public high schools. The curriculum incorporates existing work-based learning components by integrating the School-to-Work and Tech-Prep federal initiatives. The program curriculum is designed so that qualified students can immediately enter the workforce or pursue postsecondary education upon graduation. This pilot, however, is somewhat dated, and Nebraska Tech-Prep currently utilizes the Nebraska Coordinating Commission for Postsecondary Education Dual Enrollment Standards as a guide in establishing articulated programs of study.

NEVADA

Advanced Placement

(Nevada Board of Regents Handbook Title 4, Chapter 16; Nevada Board of Regents Handbook Title 4, Chapter 14)

Board policy stipulates that, at the University of Nevada-Reno, there are six types of examinations approved for earning university-level credit. These include the College Board's AP examination, the College-Level Examination Program, the ACT Proficiency Examination Program, the National League for Nursing Placement Examination; the National Occupation Trades and Industry Examination, and special examinations administered by an academic

department. Further, board policy stipulated that credit may be granted for the satisfactory completion of the College Board's AP examination with scores of three, four, or five and a satisfactory essay for English. With an objective test score of five on the English examination and a satisfactory essay, six credits may be granted.

Dual/concurrent Enrollment

(Nev. Rev. Stat. § 389.160; Nevada Board of Regents Handbook Title 4, Chapter 16; Nevada Board of Regents Handbook Title 4, Chapter 17)

Nevada Board of Regents policy states that high school juniors and seniors may be admitted and enroll in a Nevada System of Higher Education college or university. High school juniors and seniors identified as vocational program completers may be admitted to and enroll in more than six credits per semester, based on written, articulated occupational program agreements with designated school districts. High school students below junior level when identified as academically talented by the school district and recommended by the high school principal will be reviewed on a case-by-case basis for enrollment status in credit courses. Otherwise, high school students below the junior level may enroll in community-services courses only but will not receive credit. High school students who are home schooled may be admitted and may enroll if they meet certain criteria. Each college or university may choose to establish performance or testing standards to determine readiness for enrollment or admission when other criteria for admission or enrollment are not met. Nevada resident high school students may also enroll in a distance-learning, college-credit course delivered to an off-campus site for a \$25 registration fee per course if the course fee is approved by the institutional president and the chancellor. The term "high school students" includes students formally enrolled in school district-sponsored adult education high school diploma programs. Regarding dual/concurrent enrollment, Nevada statute states that high school students, including those in grades nine, 10, 11, or 12 in a charter school, who successfully complete a course at a community college or university must be allowed to apply the credit toward graduation from the charter school. Further, with approval of the state board, the board of trustees of each county school district and the governing body of each charter school must prescribe the courses for which credits may be received.

International Baccalaureate

None.

Tech-Prep

Nevada Board of Regents policy allows Tech-Prep students who complete a high school vocational course of study to get community college credit for their high school courses, equivalent to the first year of an associate in applied science degree program, and to complete the AAS degree in only one year. Each community college has agreements with area high

schools spelling out the details of granting this college credit to successful high school students in the Tech-Prep fields.

NEW HAMPSHIRE

There are no state-level policies related to accelerated learning options in New Hampshire.

NEW JERSEY

Advanced Placement

(N.J. Rev. Stat. § 18A:7E-3)

As part of a school district report card, school districts must report the percentage of students in AP courses.

Dual/concurrent Enrollment

(N.J. Rev. Stat. § 18A: 61C-(4-9))

New Jersey law requires the commissioner of the department of education, in consultation with the New Jersey Commission on Higher Education and the Presidents' Council, to establish a program to provide courses for college credit on public high school campuses to high school students through institutions of higher education. The program must consist of at least the following:

- Procedures for institutions of higher education and local districts who wish to enroll in the program.
- Procedures for students who wish to enroll in the program, including procedures to insure that no student who is academically eligible is excluded from participation in college courses offered on high school campuses because of inability to pay.
- Requirements prescribing the minimum qualifications a teacher must possess as a condition for enrollment in the program.

Higher education institutions must accept the course credit of a student who successfully completes the program, and institutions may limit courses taught to courses which are equivalent to those offered by the institution to its regularly admitted students.

International Baccalaureate

None.

Tech-Prep

None.

NEW MEXICO

Advanced Placement

(N.M. Stat. Ann. § 22-23A-5; N.M. Stat. Ann. § 22-13-1.5)

School districts and charter schools may create core curriculum frameworks to provide high quality curricula in kindergarten through grade six to prepare students for pre-AP and AP coursework in grades seven through 12. The framework must include:

- A curriculum that is aligned with state academic content and performance standards, that is **challenging, specific as to content, sequential from grade to grade, and similar to a core curriculum sequence.**
- In-depth professional development for teachers that includes vertical teaming in content areas.
- Content, materials and instructional strategies or methodologies that current research demonstrates are likely to lead to improved student achievement in pre-AP and AP coursework in grades seven through 12.

The framework may be selected from previously developed curricula or may be developed by the school district or charter school. In addition, state law created the Indian Education Division within the department. One of the division's responsibilities is to develop or select for implementation a challenging, sequential, culturally relevant curriculum to provide instruction to American Indian students in kindergarten through 6th grade, in order to prepare them for pre-AP and AP coursework in grades seven through 12.

Dual/concurrent Enrollment

(N.M. Stat. Ann. § 21-13-19)

Recently, New Mexico adopted a new rule in its constitution regarding dual credit. The purposes of dual credit are to increase opportunities for high school students and to increase efficient use of instructional staff, facilities, equipment, student support services and technical advisory committees at both the secondary and postsecondary levels, and thereby to increase the overall quality of instruction and learning available through secondary schools. Dual credit courses may be taken as elective high school credits and may satisfy high school core courses when the department standards and benchmarks are met and curriculum is aligned to meet postsecondary requirements. Final grades for all students must be delivered to the high school by the end of the high school semester or the date of graduation for all high schools. Dual credit for both academic and career technical courses requires an executed dual credit agreement between the public school district and the postsecondary institution. The dual credit agreement must address several components listed in law and must be signed by the public school district and the postsecondary institution. These components include: name of school district; name of postsecondary institution; methods of qualifying students for dual credit courses; if placement tests are used as a qualifying method for enrollment in dual credit courses, which tests are utilized; how all students and parents will be informed about dual credit and how students can participate in dual credit; kinds of counseling provided by the high school and the postsecondary institution to help students/parents decide about participation in a dual credit program;

applicable requirements for awarding of credit by the high school and postsecondary institution; method to demonstrate student awareness of academic requirements of the course; method to demonstrate student awareness of the scheduling requirements of the course; responsibilities of the student relative to successful participation and completion in a dual credit course/program; method for the secondary and postsecondary institution to provide support services, such as tutoring, career counseling/guidance, and special services; schedule for the transfer of tuition and fees by the public school district to the postsecondary institution for dual credit students; method for how the school district will handle textbooks, supplies, etc., for dual credit students; method for how the school district will fund and schedule the transportation of students between secondary and postsecondary campuses, in accordance with guidelines and definitions of the school transportation bureau; statement of who is liable for dual credit secondary students and their behavior while they are on the campus of the postsecondary institution for the purpose of attending class; the approved courses for dual credit and whether these courses are part of an articulated program of study, and if they are, whether the student receives college credit for these courses; and method for how the postsecondary institution will record dual credit on student transcripts. The public school district must transfer to the community college the tuition and fees for any student who is counted in the membership of the public school district and will receive high school credit for coursework at the community college.

International Baccalaureate

None.

Tech-Prep

None.

NEW YORK*

There are no state-level policies related to accelerated learning options in New York.

NORTH CAROLINA*

Advanced Placement

None.

Dual/concurrent Enrollment

(N.C. Gen. Stat. §115C-238.50)

State law allows boards of trustees of community colleges and local boards of education to establish cooperative innovative programs in high schools and community colleges that will expand students' opportunities for educational success through high-quality instructional programming. These programs target high school students who are at risk of dropping out and students who would benefit from accelerated academic instruction. Students are eligible for these

programs as early as 9th grade. By law, the programs must:

- Prepare students adequately for future learning in the workforce or in a postsecondary institution.
- Expand students' educational opportunities within the public school system.
- Be centered on the core academic standards represented by the college preparatory or Tech-Prep program of study, as defined by the state board of education.
- Encourage the cooperative or shared use of resources, personnel, and facilities between public schools and community colleges.
- Integrate and emphasize both the academic and technical skills necessary for students to be successful in a more demanding and changing workplace.
- Emphasize parental involvement and provide consistent counseling, advising, and parent conferencing so that parents and students can make responsible decisions regarding course taking and can track the students' academic progress and success.
- Be held accountable for meeting measurable student achievement results.
- Encourage the use of different and innovative teaching methods.
- Establish joint institutional responsibility and accountability for support of students and their success.
- Effectively utilize existing funding sources for high school, community college, and vocational programs and actively pursue new funding from other sources.
- Develop methods for early identification of potential participating students in the middle grades and through high school.
- Reduce the percentage of students needing remedial courses upon their initial entry from high school into a college or university.

Those programs that target students who are at risk of dropping out of high school before attaining a high school diploma must:

- Provide these students with the opportunity to graduate from high school possessing the core academic skills needed for postsecondary education and high-skilled employment.
- Enable students to complete a technical or academic program in a field that is in high demand and has high wages.
- Set and achieve goals that significantly reduce dropout rates and raise high school and community

college retention, certification, and degree completion rates.

- Enable students who complete these programs to pass employer exams, if applicable.

Cooperative innovative high school programs that offer accelerated learning programs must:

- Provide a flexible, customized program of instruction for students who would benefit from accelerated, higher-level coursework or early graduation from high school.
- Enable students to obtain a high school diploma in less than four years and begin or complete an associate degree program or to master a certificate or vocational program.
- Offer a college preparatory academic core and in-depth studies in a career or technical field that will lead to advanced programs or employment opportunities in engineering, health sciences, or teaching.

Cooperative innovative high school programs may include the creation of a school within a school, a technical high school, or a high school or technical center located on the campus of a community college.

International Baccalaureate

None.

Tech-Prep

(N.C. Gen. Stat. §115C-102.6A; N.C. Gen. Stat. §115C-238.50)

Regarding Tech-Prep, dual/concurrent enrollment programs must be centered on the core academic standards represented by the college preparatory or Tech-Prep program of study, as defined by the state board of education. Further, the state requires schools to develop a technology plan for using funds from the state school technology fund and other sources to improve student performance in the public schools through the use of learning and instructional management technologies. Components of the plan should include proposals for addressing equipment needs for vocational education, Tech-Prep, and science instruction.

NORTH DAKOTA

Advanced Placement

None.

Dual/concurrent Enrollment

(N.D. Cent. Code § 15.1-25-01- 15.1-25-06; North Dakota University System Procedures 402.3.2; North Dakota State Board of Higher Education Policies Section: 403.5)

North Dakota's Postsecondary Enrollment Options Program declares that any North Dakota public high school student enrolled in grades 11 or 12 is eligible

to receive high school and postsecondary credit for the successful completion of an academic or career and technical education course offered by an accredited postsecondary institution. The student's superintendent must provide written permission prior to the student enrolling in the course and determine the number of credits for which the student is eligible. The student and the student's parent or legal guardian are responsible for all costs, including tuition and transportation, associated with attendance. North Dakota University System policy states that institutions may enter into articulation agreements to facilitate postsecondary enrollment options. These agreements must include a list of eligible secondary and corresponding postsecondary courses; procedures by which students with eligible secondary coursework may demonstrate postsecondary-level proficiency; and procedures for joint secondary-postsecondary review of the articulation agreement at regular intervals. Board policy further states that any high school student enrolled in grades 11 or 12 who has received permission from the school administration is eligible for enrollment in a North Dakota University System dual credit course. However, high school counselors and teachers should advise students regarding their academic readiness to participate in dual credit courses, and only those students who are academically ready should enroll in a dual credit course. Before enrolling in a dual credit college course, high school students must obtain permission from the school district superintendent and the superintendent's signature on the North Dakota University System dual credit application form. The host campus also gives permission for the student to enroll in a dual credit course; permission is granted or denied after review of the student application for dual credit and any other campus admissions documents requested by the host institution. Campuses may publish guidelines which describe criteria for student eligibility. The superintendent determines the corresponding high school course and number of high school credits the student will receive credit by passing the dual credit college course. According to state law, high school juniors and seniors are eligible to receive high school and postsecondary credit for the successful completion of an academic course offered by any postsecondary institution in a program accredited by a national or regional accrediting organization. There is no statutory limit to the number of courses or credits received by students through dual credit, but individual campuses may place restrictions on the number of courses and credits which a student may receive via dual credit during any given academic term or time period. Dual credit students pay the university/college application fee the first time they apply to take a dual enrollment course at each campus. Dual credit students pay the current tuition rate per credit hour, along with pro-rated fees similar to those charged by the host institution for regular on-campus students. Counselors at participating high schools are

informed annually of the current tuition/fee amounts charged by their service area North Dakota University System schools. Dual credit students are not eligible for federal financial aid. The college course section taught in the high school must meet the content and academic standards of the course sections taught on campus. The dual credit course taught in the high school is a college course which offers high school credit and not a high school course which receives college credit. To ensure that college course standards are adhered to, the North Dakota University System college/university course syllabus is provided to the instructor and is used as the criteria and model for all such dual credit college courses taught in the high school. The teaching of the course in the high school is monitored by the postsecondary institution offering the dual credit. The monitoring of the dual credit course includes using the sponsoring college/university student evaluation document and procedure in order to solicit student feedback. All students enrolled in a course that is available as a dual credit college course taught within a high school will be expected to meet the academic requirements of the course irrespective of whether the student enrolls for college credit or not. In accordance with state statutes governing dual credit, high school students enrolled in a three-semester hour college course will be eligible to receive one-half of high school credit for a full semester course. Dual credit courses taught in high schools carry the same college credit as the similar course taught on the campus of the sponsoring institution and do not have a special designation on the transcript as a dual credit course. All dual credit courses have equal transferability status within the North Dakota University System. As is the case with all adjunct instructors, the instructor offering the course must be approved by the academic administrators using the same criteria and procedure that they would employ on campus. Approved high school instructors teaching dual credit courses within the high school are considered to be adjunct instructors of the sponsoring college or university. Some dual credit college courses are taught in the high school by full-time faculty members. This model has a full-time faculty member teaching a college course section directly in the high school for which dual credit (both high school and college) could be received. This course could be delivered by the college professor directly within the high school or via interactive television, if there is a link to the high school. College faculty may teach college courses in a high school for which high school credit is granted (per the district superintendent's approval) without having state secondary certification.

International Baccalaureate

None.

Tech-Prep

None.

OHIO

Advanced Placement

(Ohio Rev. Code Ann. § 3324.07; Ohio Rev. Code Ann. § 3313.533)

The board of education of each school district must develop a plan for the service of gifted students enrolled in the district. Services specified in the plan may include AP. Plans for alternative schools must include, among other things, provisions for accelerated learning programs in reading and mathematics.

Dual/concurrent Enrollment

(Ohio Rev. Code Ann. § 3324.07; Ohio Rev. Code Ann. § 3365.09; Ohio Rev. Code Ann. § 3365.08; Ohio Rev. Code Ann. § 3365.07; Ohio Rev. Code Ann. § 3365.06; Ohio Rev. Code Ann. § 3365.05; Ohio Rev. Code Ann. § 3365.041; Ohio Rev. Code Ann. § 3365.04; Ohio Rev. Code Ann. § 3365.03; Ohio Rev. Code Ann. § 3365.01; Ohio Rev. Code Ann. § 3365.02; Ohio Rev. Code Ann. § 3365.10; Ohio Rev. Code Ann. § 3365.021)

The board of education of each school district must develop a plan with options including accelerated coursework, the Postsecondary Enrollment Option Program, and AP for the service of gifted students enrolled in the district. Plans for alternative schools must include, among other things, provisions for accelerated learning programs in reading and mathematics. The state's Postsecondary Enrollment Options Program allows high school students to earn high school and college credit. High school students in a nonpublic school may participate in the program if the chief administrator of the high school notifies the department of education by April 1 prior to the school year in which the school's students will participate. After consulting with the board of regents, the state board of education adopted rules governing the program, including requirements that:

- School districts, community schools, or participating nonpublic schools provide information about the program to all students enrolled in grades eight through 11.
- Students or their parents inform the district board of education, the governing authority of a community school, or the nonpublic school administrator of the student's intent to participate in the program.
- School districts and community schools provide counseling services to students in grades eight through 11 and to their parents before the students participate in the program to ensure that students and parents are fully aware of the possible risks and consequences of participation. Counseling information must include program eligibility; the process for granting academic credits; financial arrangements for tuition, books, materials, and fees; criteria for any transportation aid; available support services; scheduling; consequences of

failing or not completing a course and the effect of the grade in the course being included in the student's grade point average; the effect of participation on the student's ability to complete the school's graduation requirements; the academic and social responsibilities of students and parents; information about and encouragement to use the counseling services of the college. The student and the student's parent sign a form stating that they have received the counseling required and that they understand the responsibilities associated with the program; also, a student may not enroll in any specific college course through the program if the student has taken high school courses in the same subject area and has failed to attain a cumulative grade point average of at least 3.0 on a 4.0 scale, or the equivalent, in those completed high school courses.

State law specifically refers to counseling for students in nonpublic schools. Chief administrators at these schools must provide counseling services to students in grades eight through 11 and to their parents before the students participate in the program to ensure that students and their parents are fully aware of the possible risks and consequences of participation. This counseling must include explaining the fact that funding may be limited and that not all students who wish to participate may be able to do so. Students are eligible for the program if they are in 9th, 10th, 11th, or 12th grade. If a college accepts a student, it must send written notice to the student and others within 10 days after acceptance. In addition, within 10 days after each enrollment for a term, the college must send these individuals written notice of the courses and hours of enrollment of the student and the enrollment options. Students may choose from the following enrollment options:

- The student may receive only college credit. The college must notify the student about payment of tuition and fees, and the student is responsible for payment of all tuition and the cost of all textbooks, materials, and fees. If the student successfully completes the course, the college awards the student full credit, but the board of education or nonpublic school does not award high school credit.
- The student may choose to receive both college and high school credit. If the student successfully completes the course, the college awards the student full credit, the high school awards the student high school credit, and the college is reimbursed.

High school credit awarded for successfully completed courses count toward graduation requirements. A student in 9th grade may not enroll in courses to receive credit toward high school graduation for more than the equivalent of four academic school years. The department of education must pay each college for

any participant enrolled in the college in the prior school year an amount computed by multiplying the tuition base by the participant's full-time equivalency percentage and multiplying the resulting amount by a percentage equal to the percentage of the participants' school day apportioned to the college. The college is paid this amount or, if it is less, the actual costs that would have been the responsibility of the participant, had the participant elected to receive only college credit. A college that is reimbursed must furnish the participant with all textbooks and materials related to the course. Students in this program are ineligible for direct financial aid though state and federal programs. If a school district or community school provides transportation to resident students in grades nine through 12, a parent of a student eligible for free or reduced-price lunch may apply to the board of education for full or partial reimbursement for the costs of transportation to the college.

International Baccalaureate

None.

Tech-Prep

None.

OKLAHOMA

Advanced Placement

(Okla. Stat. Tit. 70 § 11-103.6d; Okla. Stat. Tit. 70 § 3-150; Okla. Stat. Tit. 70 § 7-204; Okla. Stat. Tit. 70 § 1210.703; Okla. Stat. Tit. 70 § 1210.702; Okla. Stat. Tit. 70 § 1210.701; Oklahoma State Regents for Higher Education Policies and Procedures (Section 5), Policy Statement on Admission to, Retention in, and Transfer among Colleges and Universities in the State System)

Oklahoma's Advanced Placement Incentive Program is designed to improve the course offerings available to high school students throughout the state and to prepare students for admission to and success in a postsecondary educational environment. It consists of two components: financial assistance to public school teachers and schools to build and maintain successful AP Programs; and test fee assistance to public school students who have financial need or who take more than one AP test in one year. The state department of education's annual report on the program must include:

- The number of students taking AP exams and the number of exams taken.
- The number of exams that receive a score of 3 or better.
- The number of schools that have received funding and the amount of awards, by type of award.
- The number of schools offering AP courses and the number of schools with students taking AP exams.
- The number of students who receive assistance with the test fee and the average amount of assistance.

- An evaluation of the cost versus the benefits of this program.

Contingent upon appropriated funds, the state board of education may award schools a one-time equipment or instructional materials grant for the purpose of providing an AP course. If a school receives the grant, it must offer the AP courses beginning in the school year following receipt of the grant; provide the College Board training within one year of the grant award, including at least a one-week summer institute; and make available AP examinations to all students taking the course for which a grant has been awarded.

Schools also may be awarded: funding for school sites demonstrating successful implementation; subsidized training for AP courses, pre-AP courses, or IB courses; \$100 for each score of 3 or better on an AP test or 4 or better on an IB examination; a share of the test fee for those students demonstrating financial need; and grants for developing an AP vertical team. District boards of education may develop and issue a certificate of distinction that is awarded to students who meet certain criteria, one of which is units in certain subject areas that may be met through AP courses. The state board of education is required by law to develop an academic performance index (API), to be used to measure performance of schools. The index includes AP participation. In addition, Oklahoma State Regents for Higher Education policy defines extracurricular learning as learning that is attained outside the sponsorship of legally authorized and accredited postsecondary institutions. State postsecondary institutions awarding credit for such learning must validate credit on a course-by-course basis. The AP Program and the IB program are acceptable methods of validation. As part of admission standards to public postsecondary education, institutions add a standard weighting to AP courses and the IB higher-level courses.

Dual/concurrent Enrollment

(Okla. Stat. Tit. 70 § 11-103.6; Okla. Stat. Tit. 70 § 628-13; Oklahoma State Regents for Higher Education Policies and Procedures (Section 5), Policy Statement on Admission to, Retention in, and Transfer among Colleges and Universities in the State System)

Board of regents' policy outlines minimum requirements for a 12th grade student to meet provisional admission to postsecondary institutions. This includes a specified ACT or SAT score or high school grade point average, as well as class rank, for research universities, regional universities, and community colleges. Further, students must have a signed statement from the high school principal stating that they are eligible to satisfy requirements for graduation from high school no later than the spring of their senior year. Students must also provide a letter of recommendation from their counselor and written permission from their parents or legal guardian. Eleventh grade students have more

stringent requirements. Home-schooled students must be 17 years of age and meet the 12th grade ACT or SAT requirement or 16 years of age and meet the 11th grade ACT or SAT requirement. The University of Oklahoma and Oklahoma State University are authorized to set separate higher concurrent admission standards based on freshman admission standards. There are four environments in which concurrent enrollment may be offered, including those in which:

- High school students are enrolled on a college or university campus in a course with college students.
- High school students are enrolled at an off-campus site in a course that originates on campus with college students.
- High school students are enrolled in a course with college students at an established off-campus site with a regular program of study.
- High school students are enrolled at other off-campus sites and taught by regular faculty whose primary employment is as a faculty member at the institution delivering the course.

The state board of education must prepare promotional materials explaining the requirements, features, and opportunities of concurrent enrollment and must ensure that the independent school districts distribute materials to each student prior to enrollment. Students may not exceed the equivalent of 19 college credit hours in a semester, with half a high school unit considered the equivalent of a three-credit hour college course. Additionally, concurrently enrolled students may only enroll in courses in curricular areas where they have met the assessment requirements for college placement.

International Baccalaureate

(Okla. Stat. Tit. 70 § 1210.703; Okla. Stat. Tit. 70 § 1210.702; Oklahoma State Regents for Higher Education Policies and Procedures (Section 5), Policy Statement on Admission to, Retention in, and Transfer among Colleges and Universities in the State System)

As part of the Oklahoma Advanced Placement Incentive Program, contingent upon appropriated funds, schools may be awarded: funding for schools demonstrating successful implementation of IB courses; \$100 for each score of four or better on an IB examination; and a share of the test fee for those students demonstrating financial need. Oklahoma State Regents for Higher Education policy defines extracurricular learning as learning that is attained outside the sponsorship of legally authorized and accredited postsecondary institutions. State system institutions awarding credit for such learning validate credit on a course-by-course basis, and the IB program is an acceptable method of validation. As part of admission standards to postsecondary institutions, institutions add a standard weighting to IB higher-level courses.

Tech-Prep

None.

OREGON

Advanced Placement

(Senate Bill 300 (2005); Senate Bill 342 (2005))

Legislation passed in 2005 directs Oregon community colleges and public universities to develop uniform standards for awarding college credits for AP test scores. Each community college district must make at least one such program available to each interested school district within the boundaries of the community college district. Further, the Oregon State Board of Higher Education and state board of education both approved policy recommendations to: expand AP and college credit in high schools, where there is capacity and need; define college/life readiness; align the proficiencies in the systems; review recommendations for pilots for a statewide high school acceleration to college; conduct further research on successful models; and develop a field study of two to three sites for more systemic and sustainable programs.

Dual/concurrent Enrollment

(Or. Rev. Stat. § 341.450)

Other legislation passed in 2005 creates the Expanded Options Program. Effective during the 2006-2007 school year and intended to be a seamless education system for students enrolled in grades 11 and 12, the program provides students with additional options to continue or complete their education, earn concurrent high school and college credits, and gain early entry into postsecondary education. It also promotes and supports existing accelerated college credit programs and supports the development of new programs that are unique to a community's secondary and postsecondary relationships and resources; allows eligible students who participate in the program to enroll full time or part time in an eligible postsecondary institution; and provides public funding to the eligible postsecondary institutions for educational services to eligible students to offset the cost of tuition, fees, textbooks, equipment, and materials for students who participate in the program. School districts must notify all high school students and their parents or guardians of the Expanded Options Program. Further, each school district must establish a process to ensure that all at-risk students and their parents are notified about the program and make providing information to high school students who have dropped out a priority. Eligible students are those who: are enrolled in an Oregon public school; are in grade 11 or 12 or are 16 years of age; have developed an educational learning plan, and have not successfully completed four years of high school. Under this law, school districts must negotiate a financial agreement with any eligible postsecondary institution that accepts a student for enrollment for the payment of actual tuition, fees, and other required

instructional costs. Further, the Oregon State Board of Higher Education and state board of education both approved as policy the recommendations of the former's Working Group on Excellence in Delivery and Productivity, which included: expanding AP and college credit in high schools where there is capacity and need; defining college/life readiness; aligning the proficiencies in the systems; reviewing recommendations for pilots for a statewide high school acceleration to college; conducting further research on successful models; and developing a field study of two to three sites for more systemic and sustainable programs.

International Baccalaureate

None.

Tech-Prep

None.

PENNSYLVANIA*

(Pa. Cons. Stat. Tit. 24 § 26-B-1601-B; Pa. Cons. Stat. Tit. 24 § 26-B-1602-B; Pa. Cons. Stat. Tit. 24 § 26-B-1603-B; Pa. Cons. Stat. Tit. 24 § 26-B-1604-B; Pa. Cons. Stat. Tit. 24 § 26-B-1605-B; Pa. Cons. Stat. Tit. 24 § 26-B-1606-B; Pa. Cons. Stat. Tit. 24 § 26-B-1611-B; Pa. Cons. Stat. Tit. 24 § 26-B-1612-B; Pa. Cons. Stat. Tit. 24 § 26-B-1613-B; Pa. Cons. Stat. Tit. 24 § 26-B-1614-B; Pa. Cons. Stat. Tit. 24 § 26-B-1615-B)

Advanced Placement

None.

Dual/concurrent Enrollment

Concurrent enrollment is an effort to encourage a broader range of students to experience postsecondary coursework and its increased academic rigor, while still in the supportive environment of their local high school. In Pennsylvania, concurrent enrollment is for the capable, not just the exceptional student. The intent is to increase the number of students that go on to postsecondary education and to decrease the need for remedial coursework at postsecondary institutions. It is a locally administered program that allows a secondary student to concurrently enroll in postsecondary courses and to receive both secondary and postsecondary credit for that coursework.

According to state law, the Pennsylvania Department of Education (PDE) awards grants to school districts and area vocational-technical schools that have students participating in concurrent enrollment programs. These grants, which cover tuition, books, fees, and transportation, are designed to offset the cost of postsecondary coursework completed under an approved concurrent enrollment program. The department must provide a grant to any school entity that has applied for grant funds and has approved a concurrent enrollment program. The grant amount calculated for each concurrent course is based on the following:

- The total approved cost for all concurrent students who are residents of the school district or enrolled in the area vocational-technical school.
- That amount multiplied by the sum of 0.425 and the market value/income aid ratio of the school entity, provided that where a concurrent student is enrolled in an area vocational-technical school, the market value/income aid ratio is the average of the market value/income aid ratios of the concurrent students' school districts of residence.

The department provides a supplemental grant amount to any school entity that has applied for grant funds and has at least one low-income concurrent student enrolled in a concurrent course. The supplemental grant amount equals the cost of tuition, books, and fees for which a low-income concurrent student is responsible in order to enroll in a concurrent course.

A school entity seeking a grant must enter into a concurrent enrollment agreement with an eligible postsecondary institution or institutions that includes the following:

- A ratification or modification of all existing concurrent enrollment agreements.
- An explanation of the criteria used to determine student qualification for concurrent enrollment, which must include:
 - Postsecondary placement test scores.
 - The results of nationally available achievement tests or other standardized tests included in the participating school entity's local assessment system.
- Satisfactory progress toward fulfilling applicable secondary school graduation requirements.
- Demonstrated readiness for college-level coursework.
- Status as a high school junior or senior.
- A description and an explanation of the criteria used to determine concurrent courses offered by the eligible postsecondary institution that includes:
 - The course must be nonremedial.
 - The course must be offered in a core academic subject as defined by the No Child Left Behind Act of 2001.
 - The course must be identical to that offered when concurrent students are not enrolled.
 - The course must enforce prerequisite coursework requirements identical to those enforced for the course when concurrent students are not enrolled.
- A description of minimum performance criteria required for students to remain in the concurrent enrollment program.

- An explanation of student transportation responsibilities, if applicable.
- A list of all concurrent courses offered under a concurrent enrollment agreement.
- The total approved cost of each concurrent course.
- Any additional provisions deemed appropriate by the school entity and eligible postsecondary institution.

A concurrent course offered by an eligible postsecondary institution as part of a concurrent enrollment program established must meet the following requirements:

- The concurrent course must be described in the concurrent enrollment agreement and must either fulfill a graduation requirement or be identified as advanced coursework in a core academic subject as defined by the No Child Left Behind Act of 2001.
- The concurrent course must be a course for which the eligible postsecondary institution awards credit.
- The concurrent course may be conducted during the school entity's regular school hours.

A school entity must form a concurrent enrollment committee. At least four members must be appointed by the board of school directors of the school entity, and at a minimum, the members must include:

- A parent of a high school student enrolled in the school entity.
- A teacher employed by the school entity and selected by the teachers of the school entity.
- An administrator employed by the school entity and selected by the superintendent of the school entity.
- A member of the board of school directors of the school entity, who is the chairman.

The concurrent enrollment committee must:

- Develop a proposed concurrent enrollment agreement.
- Present the proposed concurrent enrollment agreement to the board of school directors of the school entity for approval.
- Meet no less than quarterly to review the concurrent enrollment program.
- Recommend any changes to the concurrent enrollment program to the board of school directors of the school entity.
- Develop criteria to permit students who are not qualified to enroll in the concurrent enrollment program.

A student enrolled in a charter school, a nonpublic school, a private school, or a home education program may enroll in concurrent courses that are part of the

concurrent enrollment agreement approved by the student's school district of residence if the student meets the qualifications and the charter school, nonpublic school, private school, or home education program awards secondary credit for a successfully completed concurrent course. The student must notify the school district of residence of the intent to enroll in the program, and the student must be included in the number of students reported to the department.

A concurrent student's official secondary school transcript must reflect that credits for a concurrent course were earned through an eligible postsecondary institution. If, after graduation from a secondary school, the concurrent student enrolls in the postsecondary institution at which the concurrent student took a concurrent course, that institution must award postsecondary credit for any concurrent courses successfully completed, but if the concurrent student enrolls in a postsecondary institution other than the one at which the student earned the credits, that institution may grant credit. A concurrent student's concurrent course enrollment may not exceed 24 postsecondary credits in any school year.

The department must publish promotional materials on its publicly accessible website that may be used by school entities to inform parents and students enrolled in the school entities about the requirements, features and opportunities of concurrent enrollment programs. To the extent that the department provides school entities with printed promotional materials for dissemination, it also must make such materials available, upon request, to any charter school, nonpublic school, private school or home education program.

A school entity that receives a grant must submit an annual report to the department that includes:

- The eligible postsecondary institution or institutions with which the school entity has established a concurrent enrollment program.
- The number of concurrent students participating in a concurrent enrollment program.
- The number of concurrent students participating in a concurrent enrollment program who are enrolled in early college high school, middle college high school or gateway to college programs.
- The approved courses offered through a concurrent enrollment program.
- The total approved cost for each concurrent course.
- The total amount of grant funds received.

The department must produce an annual report on concurrent enrollment programs using the reporting information submitted by school entities. The annual report must be provided to specified members of

the state legislature and must be published on the department's publicly accessible website.

International Baccalaureate

None.

Tech-Prep

None.

RHODE ISLAND*

There are no state-level policies related to accelerated learning options in Rhode Island.

SOUTH CAROLINA

Advanced Placement

(S.C. Code Ann. § 59-149-110; SC Code of Laws § 59-29-190; SC Code of Laws § 59-39-110; SC Code of Laws § 59-48-(10- 70))

Each South Carolina high school must provide AP courses if it enrolls an adequate number of academically talented students to support them. A student who successfully completes the AP requirements for a course and who receives a score of 3 or higher on the AP examination receives AP credit for the course in each postsecondary public institution in the state. Further, each accredited high school must provide an accelerated program of study in which any student who demonstrates sufficient ability can, upon approval of the administrative head and of the parent or guardian, be allowed to take courses that will enable the student to graduate at the end of 11 years of primary and secondary schooling. AP is also mentioned in policy related to the state's Legislative Incentives for Future Excellence (LIFE) Scholarship Program. There is a credit hour limit associated with the scholarship, but any credit hours attempted or earned before high school graduation, hours exempted by examination, or AP credit hours do not count against these semester limits.

Dual/concurrent Enrollment

In 2005, South Carolina passed statutory changes that repealed Tech-Prep legislation and replaced it with legislation intended to reform high school curricula around a career cluster model. The new legislation, known as the Education and Economic Development Act (Act 88 of 2005) includes language on dual/concurrent enrollment. The Advisory Committee on Academic Programs is required to make recommendations to the Commission on Higher Education regarding coursework that is acceptable statewide for dual enrollment to be accepted in transfer within a related course of study. Dual enrollment college courses offered to high school students by two-year and four-year colleges and universities must be equivalent in content and rigor to the equivalent college courses offered to college students and taught by appropriately credentialed faculty.

International Baccalaureate

None.

Tech-Prep

(S.C. Code Ann. § 42-1-315; S.C. Code Ann. § 42-7-65)

In 2005, South Carolina passed statutory changes that repealed Tech-Prep legislation and replaced it with legislation intended to reform high school curricula around a career cluster model. Remaining in state law, however, is the requirement that the average weekly wage for students engaged in Tech-Prep or other structured school-to-work programs on the premises of a sponsoring employer is 50 percent of the average weekly wage in the state for the preceding fiscal year.

SOUTH DAKOTA**Advanced Placement**

None.

Dual/concurrent Enrollment

(SD Codified Laws § 13-28-37)

South Dakota's statute indicates that, with prior approval by the school district, any student in grades 10, 11, or 12 may apply to a higher education institution or a postsecondary vocational education institution. If approved and accepted, the student receives full credit toward high school graduation, as well as postsecondary credit for each postsecondary course. The resident school district may pay all or part of the tuition and fees, but the student is responsible for any tuition and fees not paid by the resident school district and for any other associated costs. If the student receives a failing course grade in a postsecondary course, then the student is no longer eligible to enroll in other postsecondary courses.

International Baccalaureate

None.

Tech-Prep

None.

TENNESSEE***Advanced Placement**

None.

Dual/concurrent Enrollment

(Tenn. Code Ann. § 49-4-930; Tenn. Code Ann. § 49-4-902)

Included in the statute regarding the Tennessee Education Lottery Scholarship (TELS) is language concerning dual enrollment grants, or grants for study at an eligible postsecondary institution, that are funded from net proceeds of the state lottery and awarded to students who are attending high school and who are also enrolled in college courses at eligible postsecondary institutions, for which they will receive college credit. Dual enrollment grants were not allowed prior to the fall semester of 2005. To be eligible for a

dual enrollment grant, a high school student who is also enrolled in an eligible postsecondary institution:

- Is not ineligible for the grants that are distributed through the Tennessee Lottery.
- Must have been a Tennessee resident for at least one year immediately preceding the date of application for a grant or for the renewal of a grant.
- Is admitted to an eligible postsecondary institution as a dual enrollment student.
- Makes application for the dual enrollment grant.

A student who receives a dual enrollment grant for one semester must reapply for the next semester. To be eligible for a dual enrollment grant for a semester beyond the first semester of receipt, the student must continue to meet all eligibility requirements for the grant and must achieve a cumulative grade point average of 2.75 for all postsecondary courses attempted under a dual enrollment grant. Semester hours attempted under a dual enrollment grant do not count toward the total semester hours attempted at postsecondary institutions for the purposes of Tennessee HOPE Scholarship eligibility. State law explicitly stipulates that the General Assembly intends that funding for Tennessee HOPE Scholarships, Tennessee HOPE Access Grants, and Wilder-Naifeh Technical Skills Grants takes priority over funding for dual enrollment grants. Subject to the amounts appropriated by the General Assembly, and to any provision of law relating to a shortfall in funds available for postsecondary financial assistance from the net proceeds of the state lottery, the award for a credit hour taken under a dual enrollment grant is determined by the Tennessee Student Assistance Corporation and cannot exceed the cost per credit hour of courses taken at community colleges in the state university and community college system.

International Baccalaureate

None.

Tech-Prep

None.

Other Interesting Aspects

In 2005, the state's General Assembly passed House Joint Resolution 132, which urged the state to provide adequate funding for AP Programs.

TEXAS***Advanced Placement**

(Tex. Education Code Ann. § 32.154; Tex. Education Code Ann. § 7.021; Tex. Education Code Ann. § 7.055; Tex. Education Code Ann. § 7.102; Tex. Education Code Ann. § 28.051; Tex. Education Code Ann. § 28.052; Tex. Education Code Ann. § 28.053; Tex. Education Code Ann. § 28.055; Tex. Education Code Ann. § 28.057; Tex. Education Code Ann. § 28.058; Tex. Education Code

Ann. § 28.056; Tex. Education Code Ann. § 29.904; Tex. Education Code Ann. § 28.054; Tex. Education Code Ann. § 42.156; Tex. Education Code Ann. § 39.0721; Texas Higher Education Coordinating Board Policy § 12.31; Texas Higher Education Coordinating Board Policy § 4.83)

The Texas Advanced Placement Incentive Program recognizes and rewards students, teachers, and schools that demonstrate success in achieving the state's educational goals. As part of the program, the state offers award to schools, teachers, and students. Schools may receive a one-time \$3,000 equipment grant for providing an AP course and \$100 for each student who scores a 3 or better on an AP test. A teacher may be awarded subsidized teacher training, not to exceed \$450, for an AP course; a one-time \$250 award for teaching one of these courses; and a share of the teacher bonus pool. A student receiving a 3 or better on an AP test may receive reimbursement, not to exceed \$65, for the testing fee. The commissioner may enter into agreements with the College Board to pay for all examinations taken by eligible public school students. Students who demonstrate financial need are entitled to receive a test fee reimbursement subsidy, for up to \$25, for either examination. A school district may also apply to establish a technology immersion pilot program. The Texas Education Agency selects the participating districts and schools based on need, including whether the district or school has limited access to AP courses. If a district with one or more schools has had an average of at least 26 students in the high school graduating class for the five preceding years and has high schools that have been among the lowest 10 percent in terms of the percentage of students graduating and enrolling in college for any two consecutive years in the preceding five years, the district must do a number of things, including establishing an accurate method of measuring progress toward stated goals, which may include tracking the percentage of district high school students who are enrolled in a course for which a student may earn college credit, including AP. In addition, the commissioner must develop a gold performance rating program, based on enhanced performance. Performance standards must include the percentage of students who take AP tests and performance on those tests. According to board policy, no college credit will be awarded solely on the basis of life experience or years of service in a job. AP examinations may be used to evaluation prior learning.

Dual/concurrent Enrollment

(Tex. Education Code Ann. § 29.904; Tex. Education Code Ann. § 130.008; Tex. Educ. Stat. § 42.005; Tex. Education Code Ann. § 29.184; Tex. Education Code Ann. § 39.0721; Texas Higher Education Coordinating Board Policy § 4.82; Texas Higher Education Coordinating Board Policy § 4.83; Texas Higher Education Coordinating Board Policy § 4.84; Texas Higher Education Coordinating Board Policy § 4.85)

According to Texas statute, a public junior college may offer a course in which a student attending a state high school may enroll and for which the student may simultaneously receive course credit toward the student's high school academic requirements and as a student of the junior college, if the student has been admitted to the junior college or becomes eligible to enroll in and is subsequently admitted to it. The junior college may waive all or part of the tuition and fees for a high school student enrolled in a course for which the student may receive joint credit. The contact hours attributable to the enrollment of a high school student in a course offered for joint high school and junior college credit are included in the contact hours used to determine the junior college's proportionate share of the state money appropriated and distributed to public junior colleges, even if the junior college waives all or part of the tuition or fees for the student. In admitting or enrolling high school students in a course offered for joint high school and junior college credit, a public junior college must apply the same criteria and conditions to each student wishing to enroll in the course. A student who attends a school that is not formally organized as a high school and is at least 16 years of age is considered to be attending a high school. If a student may receive course credit toward the student's high school academic requirements and higher education academic requirements for a single course, the time during which the student attends the course may not be counted as part of the minimum number of instructional hours required for a student to be considered full time in average daily attendance. If a district with one or more schools has had an average of at least 26 students in the high school graduating class for the five preceding years and has high schools that have been among the lowest 10 percent in terms of the percentage of students graduating and enrolling in college for any two consecutive years in the preceding five years, the district must do a number of things, including establishing an accurate method of measuring progress toward stated goals, which may include tracking the percentage of district high school students who are enrolled in a course for which a student may earn college credit, including AP, IB, or dual/concurrent enrollment. In addition, the commissioner must develop a gold performance rating program, based on enhanced performance. Performance standards must include, among other things, the percentage of students who take AP tests and performance on those tests and the percentage who take and successfully complete advanced academic courses or college-level coursework offered through dual credit programs. According to Texas Higher Education Coordinating Board policy, a high school student is eligible to enroll in dual credit courses in the 11th and 12th grade if the student demonstrates college readiness by achieving the minimum passing standards under the provisions of the Texas Success Initiative or demonstrates that he or she is exempt

under the provisions of the Texas Success Initiative. An 11th grade student is also eligible to enroll in dual credit courses if the student achieves a certain score on the 10th grade Texas Assessment of Knowledge and Skills (TAKS) relevant to the courses to be attempted. To be eligible for enrollment in a dual credit course offered by a public college, students must meet all the college's regular prerequisite requirements designated for that course and must be in the 11th grade. High school students cannot be enrolled in more than two dual credit courses per semester. Dual credit courses may be taught on the college campus or the high school campus. The college ensures that a dual credit course and the corresponding course offered at the main campus of the college are equivalent, with respect to the curriculum, materials, instruction, and method/rigor of student evaluation. The state funding for dual credit courses is available to both public school districts and colleges, based on the current funding rules. The college may claim funding for all students getting college credit in dual credit courses. All public colleges, universities, and health-related institutions may waive all or part of tuition and fees for a Texas high school student enrolled in a course for which the student may receive dual course credit.

International Baccalaureate

(Tex. Education Code Ann. § 42.156; Tex. Education Code Ann. § 29.904; Tex. Education Code Ann. § 28.053; Tex. Education Code Ann. § 28.054; Tex. Education Code Ann. § 28.051)

Texas created the Texas Advanced Placement Incentive Program to recognize and reward those students, teachers, and schools that demonstrate success in achieving the state's educational goals. As part of the program, the state offers awards to schools, teachers, and students. Schools may receive a one-time \$3,000 equipment grant for providing an IB course and \$100 for each student who scores a 4 or better on an IB test. A teacher may be awarded subsidized teacher training, not to exceed \$450, for an IB course; a one-time \$250 award for teaching one of these courses; and a share of the teacher bonus pool, which is distributed by the school in shares proportional to the number of courses taught. A student receiving a 4 or better on an IB examination may receive reimbursement, not to exceed \$65, for the testing fee. The commissioner may enter into agreements with the IB Organization to pay for all examinations taken by eligible public school students. Students who demonstrate financial need are entitled to receive a test fee reimbursement subsidy for up to \$25. If a district with one or more schools has had an average of at least 26 students in the high school graduating class for the five preceding years and has high schools that have been among the lowest 10 percent in terms of the percentage of students graduating and enrolling in college for any two consecutive years in the preceding five years, the district must do a number of things, including

establishing an accurate method of measuring progress toward stated goals, which may include tracking the percentage of district high school students who are enrolled in IB courses.

Tech-Prep

(Tex. Education Code Ann. § 61.856; Tex. Education Code Ann. § 61.854; Tex. Education Code Ann. § 61.851; Tex. Education Code Ann. § 61.852; Tex. Education Code Ann. § 61.855; Tex. Education Code Ann. § 61.857; Tex. Education Code Ann. § 61.853)

According to state law, a Tech-Prep program is a program of study that

- Combines at least two years of secondary education with at least two years of postsecondary education in a nonduplicative, sequential course of study, based on the recommended high school program adopted by the state board of education
- Integrates academic instruction and vocational and technical instruction.
- Uses work-based and worksite learning, where available and appropriate.
- Provides technical preparation in a career field, such as engineering technology, applied science, agriculture, health occupations, business, applied economics, or a mechanical, industrial, or practical art or trade.
- Builds student competence in mathematics, science, reading, writing, communications, economics, and workplace skills through applied, contextual academics and integrated instruction in a coherent sequence of courses.
- Leads to an associate's degree, two-year postsecondary certificate, or postsecondary two-year apprenticeship with provisions, to the extent applicable, for students to continue toward completion of a baccalaureate degree.
- Leads to placement in appropriate employment or to further education.

A Tech-Prep consortium is a regional collaboration of school districts, institutions of higher education, businesses, labor organizations, and other participants that work together to effectively implement a regional Tech-Prep program; it is encouraged to include four years of secondary education in a Tech-Prep program. Each Tech-Prep consortium is governed by a board composed of private- and public-sector leaders. The governing board determines the policies of the consortium, in accordance with its bylaws. The governing board must select a director and an eligible entity to serve as the consortium's fiscal agent. During each fiscal year, the board, as an agent of the Texas Education Agency, allots the federal Tech-Prep implementation money to the regional consortia for administration. A consortium that seeks money must

submit an application. The board also awards grants to the consortia for eligible Tech-Prep programs. A consortium that receives a grant must annually prepare and submit a written report on the effectiveness of the Tech-Prep programs for which the consortium received assistance.

UTAH

Advanced Placement

(Utah Code Ann. § 53B-16-105; Utah Code Ann. § 53A-15-101; Utah Code Ann. § 53A-3-602.5; Utah Code Ann. § 53A-17a-120)

State law requires the Utah State Board of Regents to identify minimum scores and maximum credit for the College Board AP examination. The state board of education develops a school performance report to inform the state's residents of the quality of schools and the educational achievement of students in the state's public educational system. This report must include AP data, including:

- The number of students taking AP courses.
- The number and percent of students taking a specific AP course who take AP tests to receive college credit for the course.
- Of those students taking the test, the number and percent who pass the test.

Together, the state board of education and the state board of regents are required by law to implement a curriculum program and delivery system which allows students the option of completing high school graduation requirements and prepares them to meet college admission requirements at the conclusion of the 11th grade but does not preclude a student involved in accelerated learning programs from graduating at an earlier time. Further, they must implement an AP Program that permits students to earn high school credits while qualifying to take AP examinations for college credit. Money appropriated to the state board of education for accelerated learning programs must be allocated to local school boards for, among other things, AP.

Dual/concurrent Enrollment

(Utah Code Ann. § 53A-15-101; Utah Code Ann. § 53A-15-101.5; Utah Code Ann. § 53A-17a-120; Utah State Board of Regents Policy and Procedures - R165)

The state board of education is required to develop a school performance report to inform the state's residents of the quality of schools and the educational achievement of students in the state's public educational system. This report must include, among other things, concurrent enrollment data, including:

- The number of students taking concurrent enrollment courses.

- Of those students taking a concurrent enrollment course, the number and percent who receive college credit for the course.

Together, the state board of education and the state board of regents are required by law to implement a curriculum program and delivery system which allows students the option of completing high school graduation requirements and prepares them to meet college admission requirements at the conclusion of the 11th grade but does not preclude a student involved in accelerated learning programs from graduating at an earlier time. They also must implement a program of selected college credit courses in general and career and technical education through concurrent enrollment with one or more of the state's institutions of higher learning. In terms of financing, money appropriated to the state board of education for accelerated learning programs must be allocated to local school boards for, among other things, concurrent enrollment courses. A school participating in the concurrent enrollment program receives on a per-student basis \$50 per semester hour for each hour of higher education coursework undertaken at the school. Also in state statute is a clause that allows the state board of education and the state board of regents, in consultation with the Utah Education Network, to develop and implement a concurrent enrollment course of study in Mandarin Chinese. Finally, the state board of regents has adopted in-depth policy regarding concurrent enrollment, which is designed to allow prepared high school students to take courses necessary to graduate from high school and, at the student's option, to become better prepared for the world of work or to complete selected college-level courses corresponding to the first year of coursework at a higher education institution leading to program completion or a degree. Policy defines concurrent enrollment as "the enrollment in college courses, for dual high school and college credit, by public high school students who continue to be enrolled as high school students and counted in Average Daily Membership." The school district and higher education institutions negotiate all aspects of the concurrent enrollment annual contracts, including course location, instructors, and funding arrangements. Distinct from concurrent enrollment is early admission, which is enrollment in college courses for credit by high school students who have left high school prior to graduation. Policy explicitly states that concurrent enrollment in its various forms should provide high-quality college-level academic, career and technical education opportunities to qualified high school students. This purpose must take precedence over such issues as economic expediency or acceleration of the high school or college experience. Local schools and higher education institutions must establish eligibility requirements, which may include:

- Junior or senior standing, sophomores by exception.
- A grade point average, ACT score, or a placement score which predicts success (generally considered to be a B average or ACT score of 22 or higher).
- Supportive letters of recommendation.
- Approval of high school and college officials.

Tuition or fees may not be charged to high school students for participation in the program, but students may be assessed a one-time admissions application fee per credit-granting institution. Students within commuting distance of a postsecondary institution are encouraged to pursue their concurrent enrollment study on the campus. In addition, the commissioner of higher education and the state superintendent must appoint a concurrent enrollment coordinating committee, composed of an equal number of higher education and public education administrators, to coordinate concurrent enrollment activities. The committee is required to:

- Develop a list of approved courses for concurrent enrollment in consultation with college/university academic departments.
- Advise the two governing boards regarding in-service training and professional development programs.
- Oversee the research and evaluation of concurrent enrollment practices in Utah.

International Baccalaureate

None.

Tech-Prep

None.

VERMONT

Advanced Placement

None.

Dual/concurrent Enrollment

(Vt. Stat. Ann. tit. 16, § 1593; Vt. Stat. Ann. tit. 16, § 4011)

With respect to dual/concurrent enrollment, Vermont law states that a secondary technical student may be enrolled in postsecondary technical courses at the expense of the student's school district if the enrollment is accepted by the postsecondary institution and approved by the district as being in the best interest of the student and if the enrollment is approved for credit toward high school graduation requirements. The school board awarding graduation credits must consider the recommendation of the regional advisory board and provide an opportunity for the secondary student to receive postsecondary credit. Further, Vermont has created the Vermont Academy of Science and Technology (VAST), which allows students to complete the senior year of high school and the

freshman year of college simultaneously. State law requires the commissioner to pay an amount equal to 87 percent of the base education payment to VAST for each 12th grade student enrolled.

International Baccalaureate

None.

Tech-Prep

None.

VIRGINIA

Advanced Placement

(Va. Code § 22.1-254.1; Va. Code § 22.1-253.13:1; Va. Code § 22.1-253.13:3)

By law, local school boards must notify students (including those receiving home instruction) and their parents of the availability of AP, the qualifications for enrollment, and the availability of financial assistance to low-income and needy students to take the AP examination. In recognizing educational performance in the school divisions, the board of education must include consideration of special school division accomplishments, such as the numbers of students in AP.

Dual/concurrent Enrollment

(Va. Code § 22.1-253.13:1; Va. Code § 22.1-253.13:3)

Local school boards must implement a plan to notify students and their parents of the availability of dual enrollment courses and the qualifications for enrollment. In recognizing educational performance in the school divisions, the board of education must include consideration of special school division accomplishments, such as the numbers of dual enrollments.

International Baccalaureate

(Va. Code § 22.1-253.13:1; Va. Code § 22.1-253.13:3)

By law, local school boards must notify students and their parents of the availability of the IB program, the qualifications for enrollment, and the availability of financial assistance to low-income and needy students to take IB examinations. In recognizing educational performance in the school divisions, the board of education must include consideration of special school division accomplishments, such as the numbers of IB courses.

Tech-Prep

None.

WASHINGTON

Advanced Placement

(Wash. Rev. Code § 28A.300.118)

State law requires each school that includes 9th grade to publish annually and deliver to each parent with children enrolled in 9th through 12th grade information concerning the entrance requirements and the

availability of programs in the local area that lead to college credit, including AP courses. Further, the superintendent of public instruction must notify senior high schools and any other public school that includes 9th grade of the names and contact information of public and private entities offering programs leading to college credit, including information about online AP courses.

Dual/concurrent Enrollment

(Wash. Rev. Code § 28A.600.370; Wash. Rev. Code § 28A.600.400; Wash. Rev. Code § 28A.600.160; Wash. Rev. Code § 28A.600.350; Wash. Rev. Code § 28A.600.330; Wash. Rev. Code § 28A.600.360; Wash. Rev. Code § 28A.600.380; Wash. Rev. Code § 28A.600.385; Wash. Rev. Code § 28A.600.390; Wash. Rev. Code § 28A.300.118; Wash. Rev. Code § 28A.600.340)

Washington's Running Start Program enables 11th and 12th grade students to earn both college and high school credit by taking courses free of charge at community and technical colleges and certain four-year institutions. State law requires each school that includes 9th grade to publish annually and deliver to each parent with children enrolled in 9th through 12th grade, information concerning the entrance requirements and the availability of programs in the local area that lead to college credit. Colleges are reimbursed by school districts whose students participate in Running Start, and students are responsible for books and other expenses. Before being admitted to a college through the Running Start Program, high school students are tested to determine whether they are ready to do college-level work. A high school student may enroll in a postsecondary course for both high school and postsecondary credit only if the board of directors of the student's school district has decided to participate in the program. Participating higher education institutions, in consultation with the school district, may establish admission standards for these students. If no comparable course is offered by the secondary school, the district superintendent must determine how many credits to award for the course, and this determination must be made in writing prior to enrollment. The credits apply toward high school graduation and appear on the student's transcripts. Any state institution of higher education may award postsecondary credit for college-level and vocational courses, and the institution may not charge for the award of credits. The district is not responsible for transportation to and from the higher education institution. The district is responsible, however, for transmitting to the higher education institution an amount per each full-time-equivalent college student at statewide uniform rates for vocational and nonvocational students. The institution cannot require the student to pay any other fees. Any middle, junior high, or high school using educational pathways - which may include, but are not limited to, programs such as

work-based learning, school-to-work transition, Tech-Prep, vocational-technical education, Running Start, and preparation for technical college, community college, or university education - must ensure that all participating students have access to the courses and instruction necessary to meet admission requirements at baccalaureate institutions. Further, school districts in Washington and community colleges in Oregon and Idaho may enter into cooperative agreements for the purpose of allowing 11th grade students to earn high school and college credit concurrently.

Other Interesting Aspects

According to a report by the Washington Higher Education Coordinating Board, the 2004 legislature passed two bills that addressed the issue of expanding dual enrollment options for high school students. These were Senate Bill 6561, which called for the Washington Office of Superintendent of Public Instruction, State Board for Community and Technical Colleges, Higher Education Coordinating Board, Council of Presidents, and Workforce Training and Education Coordinating Board, along with public secondary school principals and public school district superintendents, to strengthen and expand dual enrollment programs on high school campuses; and House Bill 3103, which called on the higher education coordinating board to report to the legislature every two years on efforts to expand dual enrollment and to increase articulation and align curricula between high schools and higher education. Governor Locke vetoed Senate Bill 6561, in large part because it duplicated the requirements of House Bill 3103. In his veto message, however, the governor asked the Washington Office of Superintendent of Public Instruction, State Board for Community and Technical Colleges, and the Higher Education Coordinating Board to create incentives for offering dual enrollment programs and to remove barriers that inhibit their availability.

International Baccalaureate

(Wash. Rev. Code § 28A.300.118)

State law requires each school that includes 9th grade to publish annually and deliver to each parent with children enrolled in 9th through 12th grade information concerning the entrance requirements and the availability of programs in the local area that lead to college credit, including classes such as AP, Running Start, Tech-Prep, skill centers, college in the high school, and IB.

Tech-Prep

(Wash. Rev. Code § 28A.600.160; Wash. Rev. Code § 28A.300.118)

According to state law, each school that includes 9th grade must publish annually and deliver to each parent with children enrolled in 9th through 12th grade information concerning the entrance requirements and the availability of programs in the local area that lead to college credit, including classes such as AP,

Running Start, Tech-Prep, skill centers, college in the high school, and IB. Further, any middle, junior high, or high school using educational pathways - which may include, but are not limited to, programs such as work-based learning, school-to-work transition, Tech-Prep, vocational-technical education, Running Start, and preparation for technical college, community college, or university education - must ensure that all participating students have access to the courses and instruction necessary to meet admission requirements at baccalaureate institutions.

WEST VIRGINIA

Advanced Placement

(W. Va. Code § 18-20-9; W. Va. Code § 18-2E-3a; W. Va. Code § 18-2-6; W. Va. Code § 18-2E-8d; W. Va. Code § 18-2F-6; W. Va. Code § 18-9A-2; W. Va. Code § 18A-3A-5; W. Va. Code § 18B-1B-4; W. Va. Code § 18-2E-5; W. Va. Code § 18B-17-2; W. Va. Code § 18B-17-3; W. Va. Code § 18C-7-6; W. Va. Code § 18-2E-8b; West Virginia Higher Education Policy Commission Series 15 Sections 1-5; West Virginia Higher Education Policy Commission Series 19 Sections 1-10)

West Virginia law defines AP Programs as those programs offering classes which are advanced in terms of content and performance expectations of those normally available for the age/grade level of the student and which provide credit toward graduation and possible college credit. AP and honors programs are designed to meet the needs of students who have the potential and desire to complete a curriculum more demanding than that offered in the regular classroom for their current grade level. Honors and AP curricula may include AP courses offered through the College Board or other public or private foundations, corporations, institutions, or businesses whose courses are generally accepted as leading to advanced placement or standing in a postsecondary institution. The state established the West Virginia Advanced Placement Center to provide statewide coordination for the continued growth and development of AP Programs in the state's high schools. Specifically, the center:

- Coordinates AP teacher training institutes.
- Establishes a cadre of instructors for the AP teacher training institutes.
- Provides follow-up teacher training for AP teachers.
- Identifies and obtains external sources of funding.
- Networks AP teachers through an AP newsletter.
- Serves as a liaison for the College Board and the West Virginia Department of Education, county boards of education, institutions of higher education, the West Virginia AP advisory council, the Legislature and the governor.
- Conducts research and evaluates the state's AP Program.

- Assists county boards of education and local schools in establishing, evaluating and maintaining AP Programs.
- Serves as a clearinghouse for AP materials and correspondence.
- Certifies individual courses that meet the established standards of AP Programs.

Students in West Virginia receive certificates of proficiency that indicate the program of study completed if the student has completed the required major courses, or higher-level courses, AP courses, college courses, or other more rigorous and recommended courses. Prior to the end of 8th grade, a placement advisory committee must convene for the purpose of determining whether a student should be placed in an honors or AP Program. Upon determination that placement in such a program is appropriate, the committee then must write a four-year education plan that designates which honors or AP courses are appropriate and that is agreed to by the school, parent, and student. To the maximum extent possible, honors and AP courses must be taught by a regular classroom teacher. With the written consent of his or her parents, a student may take a higher-level course, AP course, college course, or other more rigorous substitute. West Virginia also has an incentives-based shares program by which, when funding is available, students may receive an award for performance for successful completion of an AP course and passage of the AP exam. Although there are no actual limits on the number of students who can participate in AP, no more than 4 percent of net enrollment in grades one through eight may be counted as enrolled in gifted education and no more than six percent of net enrollment of grades nine through 12 may be counted as enrolled in gifted education. The state board has established a program to provide training to teachers in the instruction of honors and AP courses. State law requires an appropriation to the state board to assist in the implementation of teacher training. In terms of accountability, the state board must review the West Virginia Department of Education to ensure that it is able to provide the best communication, technical assistance, and support for schools and school systems in a number of areas, including establishing policies which allow students to take an AP courses or college courses, among other things. The state board has adopted education standards for student, school, and school system performance, which include the percentage of students who enroll in and the percentage of students who successfully complete AP, by grade level. AP courses are excluded from consideration for the minimum grade point average requirement to sustain the state's PROMISE scholarship. According to West Virginia Higher Education Policy Commission legislative rules, it is important to encourage students at all educational levels to aspire to higher intellectual achievements, and that

the Advanced Placement Program is an instrument that allows high school students to master college subject matter and to document their intellectual achievements through successful completion of AP examinations. The commission encourages high school students to participate in this program, through which successful completion of examinations will result in the acceptance of credit by all West Virginia state colleges and universities. High school students scoring a minimum of 3 on AP examinations will receive credit at any state college or university, as indicated in the list of AP exams offered by the College Board. When the examination is in the area of the student's major, the institution will award credit toward the major or the core curriculum. An academic department within the institution may, upon approval of the institutional faculty, require a higher score than 3 on an AP test if the credit is to be used toward meeting a course requirement for a major in the department. Although the state encourages dual/concurrent enrollment, the Advanced Placement Program continues to be encouraged. The credential for granting college credit remains student performance on the AP exam. No credit is awarded for AP courses when AP exams are not taken.

Dual/concurrent Enrollment

(W. Va. Code § 18-2E-5; W. Va. Code §18B-1-1a; West Virginia Higher Education Policy Commission Series 19, Sections 1-10)

According to state law, the overall focus of education is on a lifelong process, which is to be as seamless as possible at all levels and is to encourage citizens of all ages to increase their knowledge and skills. To achieve this, there must be opportunities for advanced high school students to obtain college credit prior to high school graduation. Any off-campus credit instruction must meet the same rigorous standards as required for on-campus instruction. Thus, any college course offered for high school students must meet the standard of a campus-based college course, which means that it needs to include a syllabus, text, assignments, assessments, evaluation of students, and evaluation of faculty that is equivalent to a campus course. The curriculum is limited to lower division undergraduate courses. In cooperation with a local school system, an institution may offer an undergraduate college course in a high school for advanced high school students who qualify for college admission. At the discretion of the high school, the student is awarded high school credit as well as college credit for successful completion of a course. All faculty serving as instructors for college credit-bearing courses offered to advanced high school students, whether on the college or the high school campus, must meet the minimum faculty credential requirements for instructional rank at the college that will grant the credit. The institution granting credit must assign adjunct part-time faculty status to high school teachers who teach

such courses. High school students desiring to enroll in a college credit-bearing course must apply for admission status and meet all admission requirements for the institution which is offering the college credit course. Additionally, students must meet all course requirements and prerequisites. In addition to meeting these requirements, all students who enroll must have the approval of the high school principal. High school students enrolled in college courses at their high schools will be assessed tuition/fees consistent with the institution's approved fee structure. Alternatively, to make college courses more accessible to high school students, an institution may establish a special tuition fee structure for high school students. Special tuition/fees for high school students established by any West Virginia public higher education institution must be set, at a minimum, at three-fourths of the rate of the lowest regular off-campus rate established by any West Virginia public higher education institution. All high school students must be charged the special tuition/fee rate or the regular tuition/fees approved for the institution granting the credit. The credit-granting institution may not use its own resources to pay any student's assessed tuition/fees. Except for tuition/fee waivers in third-party sponsored agreements, no tuition/fee waivers are to be granted. College courses offered to high school students in the high schools will be taught by either the regular or adjunct part-time faculty members of the institution granting the college credit. In the special circumstances of a high school teacher who teaches a course during the regular school day, the college granting the credit may reimburse the high school for the instructor's service. Each college or university offering college courses for high school students may make arrangements for the award of dual credit with the participating high school. Each college or university which offers college-level courses for or in West Virginia high schools must maintain a record of the courses and enrollments for such courses and submit any reports of college courses for high school students as deemed necessary. The state board has adopted education standards for student, school, and school system performance, which include the percentage of students who enrolled in and successfully completed dual credit, by grade level. Dual credit courses are excluded from consideration for the minimum grade point average requirement to sustain the state's PROMISE scholarship.

International Baccalaureate

None.

Tech-Prep

(W. Va. Code § 18A-3A-2)

According to West Virginia state law, the Center for Professional Development may permit and encourage school personnel - such as classroom aides, higher education teacher education faculty, and higher education faculty in programs such as articulated Tech-Prep associate degree and others - to participate in

appropriate professional development programs and activities with public school professional educators.

WISCONSIN*

Advanced Placement

(Wis. Stat. § 115.38; Wis. Stat. § 115.787; Wis. Stat. § 120.12; University of Wisconsin System Regent Policy 91-3)

According to state law, the school board of a common or union high school district must pay the costs of AP examinations taken by students enrolled in the school district who are eligible for free or reduced-price lunches in the federal school lunch program. In addition, the state superintendent must develop a school and school district performance report, indicating the percentage of students participating in AP courses. Once a child with a disability reaches the age of 14 and until the he or she is no longer eligible for special education and related services, his or her individualized education plan must include a statement identifying the courses of study needed to prepare the student for a successful transition to his or her goals for life after high school, which may include participation in AP courses or a vocational education program. Board policy explicitly states that high school students can master college subject matter and document intellectual achievements through the AP Program. Further, policy states that scores of 3, 4, or 5 on the AP examinations will be accepted for degree credit by all University of Wisconsin System institutions. Each institution will determine whether course-equivalent credit or credit in the major will be granted and the AP exam score required to grant credit for these purposes.

Dual/concurrent Enrollment

(Wis. Stat. § 118.55)

Wisconsin state statute addresses dual/concurrent enrollment through its Youth Options Program. Any public school student enrolled in the 11th or 12th grade who is not attending a technical college may enroll in a higher education institution for the purpose of taking one or more nonsectarian courses. The student must indicate on the application whether he or she will be taking the course for high school credit or postsecondary credit. The student must also specify on the application whether, if admitted, the institution can disclose the student's grades, courses that he or she is taking, and attendance record to the public school in which the student is enrolled. The school board pays the institution of higher education, on behalf of the student, the actual cost of tuition, fees, books, and other necessary materials directly related to the course if the student attends an institution within the University of Wisconsin System. If the school board or state superintendent determines that there is no comparable course available at the secondary school, then the student is not responsible for any portion of the tuition and fees. A student's

parent or guardian may apply for reimbursement for transportation costs if he or she is unable to afford it. If a student fails or does not complete the course (one that is not comparable to any course at the high school) at the postsecondary institution or technical college, the student (if an adult) or the parent or guardian must reimburse the school board the amount paid on the student's behalf.

International Baccalaureate

None.

Tech-Prep

None.

WYOMING

Advanced Placement

None.

Dual/concurrent Enrollment

(Wyo. Stat. § 21-20-201)

State law allows Wyoming school district boards of trustees and community college district boards of trustees or the University of Wyoming to enter into an agreement to establish postsecondary education enrollment options programs. As part of such a program, district resident students may attend postsecondary education programs offered by the university or a participating community college, and additional eligibility requirements may be established by the postsecondary institution. Courses may be offered at the university or college campus, an off-campus center, or a high school. Students who successfully complete a course receive academic credit by the resident school district that counts toward graduation requirements. In addition, the student receives postsecondary education credit for any course successfully completed under the program.

International Baccalaureate

None.

Tech-Prep

None.

Appendix C

Postsecondary Institutional Policies and Practices

Colleen O. Sathre¹

Introduction

The use of accelerated learning involves a variety of players: students who take the courses and exams; teachers and other school personnel who provide the courses and track credits and grades for transcripts; and postsecondary institutions that make decisions on how the credits will apply. Each is an important part of the dynamics involved in making accelerated learning work for both the student and the postsecondary community.

This appendix focuses on postsecondary institutions, particularly their policies and practices as reported through an online survey of chief academic officers around the nation. By asking colleges and universities about their accelerated learning policies and practices, this study hopes to shed light on two questions. Who makes the important decisions about accelerated learning credit? What campus decisions are typically made? The institutional perspective contributes to the overall goal of the *Accelerated Learning Options* project by informing the policy, education, and research communities and perhaps by improving educational opportunity and access.

To provide a comprehensive picture of current postsecondary institutional policy and practice, the *Accelerated Learning Options* project staff and a consultant conducted a web-based survey in spring 2005 of nonprofit public and private two- and four-year institutions in the 50 states. The survey sought information in five broad categories:

- General institutional policies and practices.
- Admissions policies and practices.
- Credit assignment practices.
- Collaboration with high schools.
- Institutional financial assistance for accelerated-learning options.

After a presentation of survey methodology, this appendix reports findings.

Methodology

A national web-based “Survey of Institutional Policies and Practices Related to Accelerated Learning Options” was designed and conducted by the Western Interstate Commission for Higher Education (WICHE) in spring 2005. Survey results provide a picture of current

postsecondary institutional policies and practices related to accelerated learning credit and form the basis for Chapter 3 and this appendix. A copy of the survey instrument, including the cover memorandum, is provided at the end of this appendix.

Survey Instrument and Pilot Test

Through the joint efforts of the WICHE staff and a consultant, a draft survey instrument was developed. Each question was carefully written to be simple and direct, eliciting yes/no answers or choice(s) among defined options, and, where appropriate, providing the opportunity to share additional information. Each question was repeatedly refined to ensure that the language would not confuse respondents or yield multiple plausible meanings. In addition, definitions of critical terms and brief introductions to each survey section were provided so that respondents would have the same understanding of the questions as the survey authors. To help ensure that respondents had accurate information to respond to the questions, the initial recipient was encouraged to consult with colleagues or forward the survey instrument within his or her institution. Instructions made it clear that each institution should submit only one completed survey. To encourage a high level of response, the survey instrument was kept to 17 questions and administered online. Basic demographic data was also solicited.

The survey instrument underwent two external reviews to improve wording and relevance. First, it was reviewed by four administrators whose backgrounds span four-year and two-year institutions, including two with extensive survey research experience. The oral interviews that accompanied these reviews resulted in clarification and refinement of survey questions. Prior to the finalization of the survey instrument, it was pilot tested online with six chief academic affairs officers, five from two-year institutions and one from a four-year institution. The wording of several questions was refined as a result of this pilot.

Target Population and Survey Recipients

Chief academic officers (CAOs) at U.S. nonprofit, postsecondary institutions were the target population for the survey. A data file for CAOs, including names, titles, email addresses, and other contact information, was purchased from Higher Education Publications (HEP), which annually collects this information.

An electronic file containing directory information for 3,312 CAOs was obtained. WICHE staff then matched this data set with data from the Integrated Postsecondary Education Data System (IPEDS). The variables used to match the data sets included institutional control, sector, Carnegie classification, and 2003 undergraduate enrollment. Records in the original HEP file that had missing values in the unique identifier field were deleted.

In order to collect a single response from each institution, the data set was purged of duplicate institutional records. Where more than one individual was listed for an institution, the data set retained the individual determined to be the most appropriate, based on his or her title. All other records for that institution were deleted from the data set. In addition, for-profit and specialized institutions (such as schools of medicine or law) were removed from the data set. Institutions that reported no IPEDS enrollment data were deleted if they were a branch campus of a larger institution that was included in the data set.

The final data set contained 2,232 CAO/institution records and comprised the total population of CAOs who were the recipients of the survey. The surveyed CAOs represented institutions in all 50 states. Sixty percent (1,335) were from public institutions and 40 percent (897) were from private schools. There were 225 research universities represented, as well as 549 master's institutions, 516 baccalaureate colleges, 921 two-year institutions, and 21 tribal colleges. In terms of undergraduate enrollment, the institutions ranged in size from 12 to 58,490, with a median size of 2,987.

Survey Distribution

With an introductory letter from David Longanecker, executive director of WICHE, the survey was distributed via email in late March 2005. The email included a hyperlink to the URL address where respondents could access the survey instrument. The survey was administered using WebSurveyor, an online survey research tool which offers an extensive question and response library and allows users to format the appearance and structure of the survey to fit the purposes of the project. Responses were downloaded from WebSurveyor as flat files and analyzed using Microsoft Excel and SPSS (Statistical Package for the Social Sciences).

Survey Follow-up, Respondents, and Bias

Respondents had a total of nearly six weeks to submit a completed survey. An e-mail reminder was sent prior to the initial three-week deadline, and two additional reminders were sent prior to the final survey deadline

of May 6, 2005. When survey responses were closed on May 6, the response rate was 25.6 percent.

Issues associated with sampling and respondent bias were minimized by inviting the targeted universe to participate in this survey and verifying that the responding population matched the surveyed population in the ways described here. The responding population of 539 institutions was 65 percent public and 35 percent private. This approximates the surveyed population, which was 60 percent public and 40 percent private. Research/doctoral institutions made up 10 percent of the surveyed institutions and 11 percent of the responding population; master's/baccalaureate institutions made up 48 percent of the surveyed institutions and 46 percent of the responding population; and associate's/tribal institutions composed 42 percent of both the surveyed and responding institutions.

Data Analysis

The final data set was analyzed by:

- Institutional control (public/private).
- Three institutional type groupings based on Carnegie classifications: research/doctoral, master's/baccalaureate, and associate's/tribal. Because the number of responding tribal institutions was small, summary findings include their responses only when reporting aggregate responses.
- Institutional size (small, medium, large): 2,000 students for small institutions; 2,001 to 5,500 for medium institutions; and 5,501 or greater for large institutions.
- Institution's region (Midwest, Northeast, South, and West).

Cross tabulations produced descriptive statistics to enable an analysis by institutional control and institutional type. Summary findings are structured around the major topics covered in the survey. The report narrative is supplemented with tables and figures that provide an additional level of detail. It is important to note that throughout the report, cells with fewer than five responses are not displayed in the graphs.

Findings

Part A: Institutional Accelerated Learning Policy and Practice and Lead Responsibilities

This study includes an examination of policy and practice at the postsecondary institutional level because of the paucity of systematic studies on how colleges and universities approach accelerated

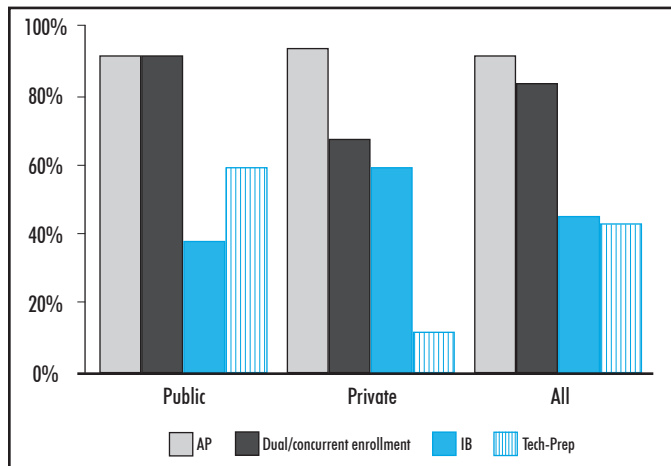
learning. Key institutional issues involve not only the existence of accelerated learning policy to guide institutional decisions but also the degree of consistency between policy and practice.

Written Accelerated Learning Policies and Differences between Policy and Practice

A series of questions centered on whether colleges and universities had written policies concerning the acceptance of major accelerated learning options: Advanced Placement (AP), dual/concurrent enrollment, International Baccalaureate (IB), and Tech-Prep. In addition, CAOs were asked whether it was the practice of their institutions to consider any of these accelerated learning options for the purpose of admissions or for credit requirements (below, “practice” refers to this issue).

Responses indicate that it is most common for all types of public and private institutions to have written AP policies. As Figure C.1 shows, a sizeable share of institutions also report having written dual/concurrent policies, though this is more prevalent in the public sector. Written Tech-Prep policies exist primarily at public associate’s institutions. Public and private research/doctoral institutions are the most likely to report having written IB policies.

Figure C.1. Written policies, by institutional control



Survey responses also indicate that there is almost no difference between the number and share of institutions that have written policies and the number and share of those that by practice consider any of the four accelerated learning options for admissions or credit requirements. This uniformity between policy and practice for each of the surveyed accelerated learning options is summarized in Table C.1.

Table C.1. Share of all institutions reporting accelerated learning written policies and/or engaging in accelerated learning practice

	Written policies (%)	Engage in practice (%)
Advanced Placement	91	91
Dual/concurrent enrollment	83	85
International Baccalaureate	45	51
Tech-Prep	43	45

Although there is uniformity between policy and practice overall, detailed findings for written policy and the existence of practices for each of the accelerated learning options reveal some differences by institutional type and size, as well as by region.

Advanced Placement (AP). As noted in Table C.1, 91 percent of all responding institutions report having written policies, and the same share report engaging in the practice of considering AP courses for purposes of admissions and/or credit requirements. As Figure C.2 shows, AP policy and practice are reported by

Figure C.2. Advanced Placement policy and practice, by control and institutional type

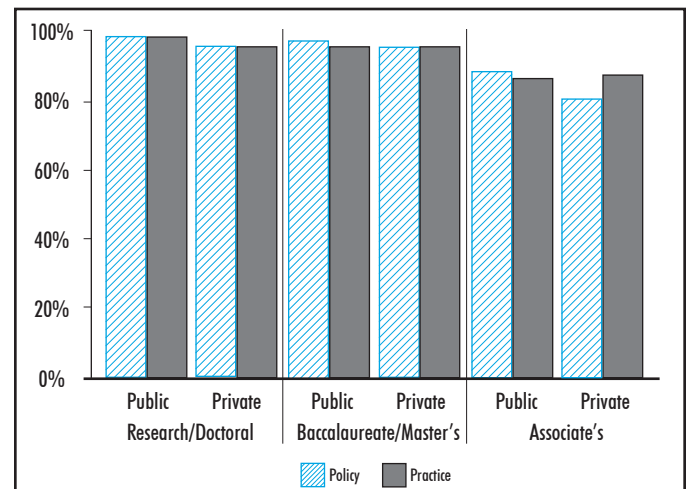
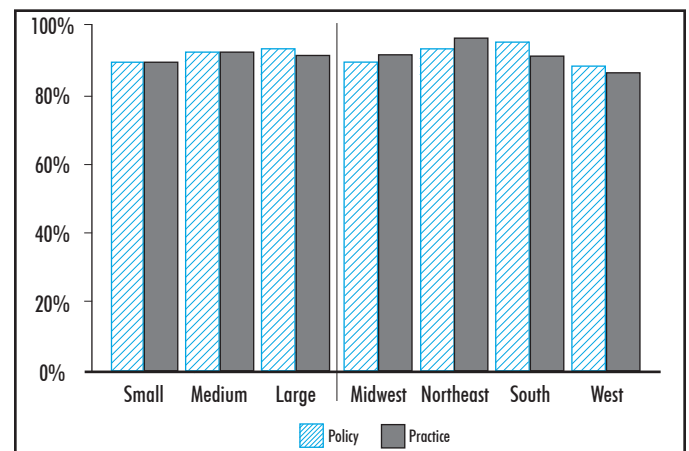


Figure C.3. Advanced Placement policy and practice, by size and region



nearly all public and private research/doctoral and baccalaureate/master's institutions. Very large shares of public and private associate's institutions also report having written AP policies and engaging in the practice of considering AP courses. The prevalence of written AP policies and the existence of AP practice vary little by institutional size or regional location, although institutions in the West are slightly less likely to engage in AP practice than are institutions in other parts of the country (Figure C.3).

Dual/concurrent. All types of public institutions (research/doctoral, baccalaureate/master's, and associate's) report having written dual/concurrent enrollment policies and engaging in dual/concurrent enrollment practice more often than do their private counterparts (Figure C.4). In particular, fewer private research/doctoral institutions report having written dual/concurrent policies and engaging in dual/concurrent enrollment practice than do public research/doctoral institutions (Figure C.4).

Figure C.4. Dual/concurrent enrollment policy and practice, by control and institutional type

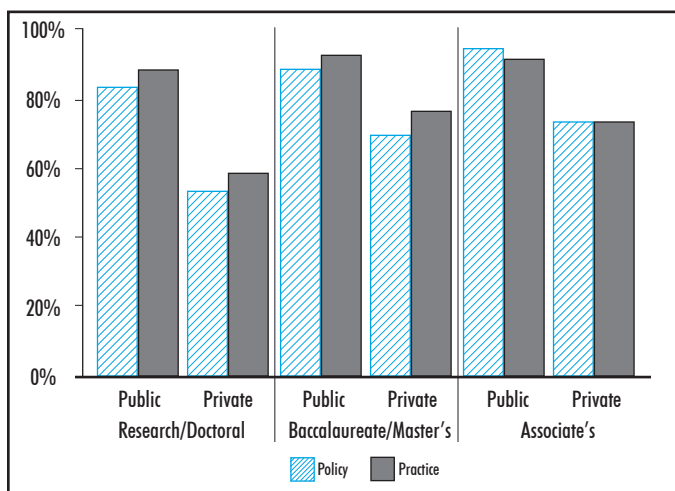
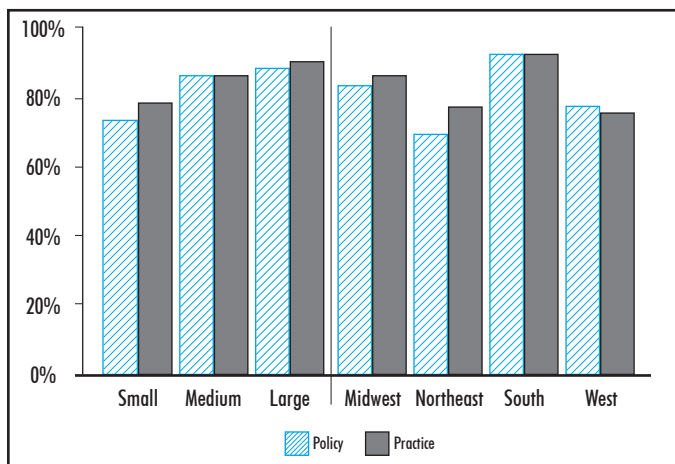


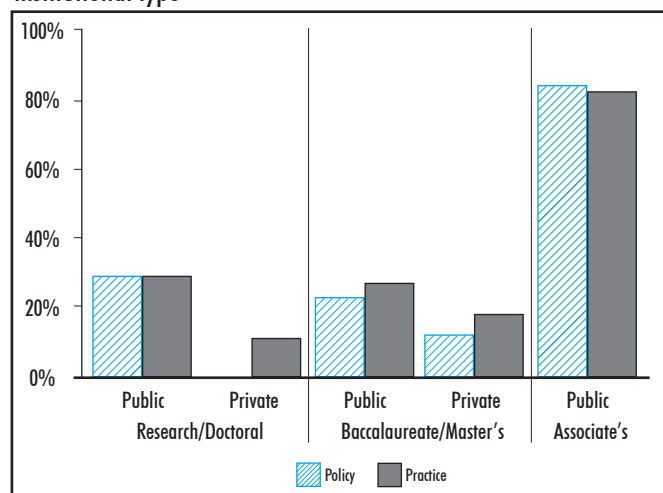
Figure C.5. Dual/concurrent enrollment policy and practice, by size and region



As Figure C.5 displays, the larger an institution, the more likely it is to have written dual/concurrent policy and engage in dual/concurrent enrollment practice. This figure also indicates that institutions from the South are the most likely to report dual/concurrent policy and enrollment practice, followed by institutions from the Midwest. Institutions from the Northeast and West lag a little behind the South and Midwest, but still roughly three-fourths of them report dual/concurrent policy and enrollment practice (Figure C.5).

Tech-Prep. Less than one-half of all institutions report either written Tech-Prep policies or the practice of considering Tech-Prep courses for admissions purposes (see Table C.1). And as Figure C.6 demonstrates, the existence of Tech-Prep policy and practice is concentrated at public associate's institutions; more than 80 percent of these institutions report both Tech-Prep policy and practice.

Figure C.6. Tech-Prep policy and practice, by control and institutional type



Note: Cells with fewer than five responses are not displayed.

Large and medium-sized institutions are about twice as likely to report that they have written Tech-Prep policy and engage in Tech-Prep admissions practice as are small institutions (Figure C.7). Roughly comparable shares of institutions from the Midwest, South, and West report Tech-Prep policy and practice. Institutions in the Northeast are somewhat less likely to report Tech-Prep policy and practice (Figure C.7).

International Baccalaureate (IB). Ninety percent of private research/doctoral institutions report having written IB policy and engaging in the practice of considering IB courses for admissions purposes and/or credit requirements. Public research/doctoral institutions follow a close second, with 83 percent reporting both IB policy and practice. Survey responses indicate that it is slightly more likely for public and private baccalaureate/master's institutions to engage in the practice of considering IB courses for admissions

Figure C.7. Tech-Prep policy and practice, by size and region

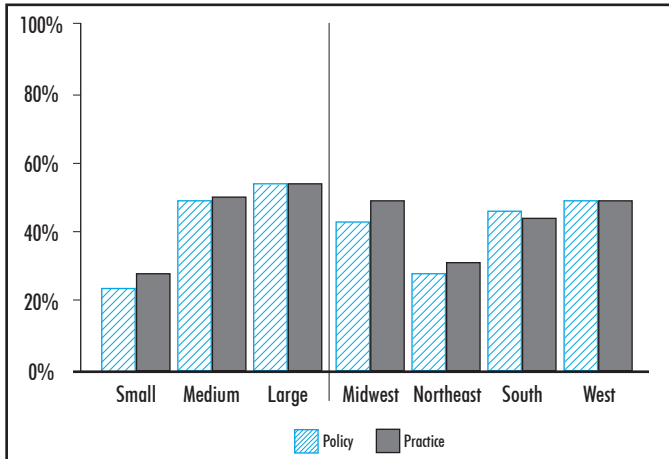
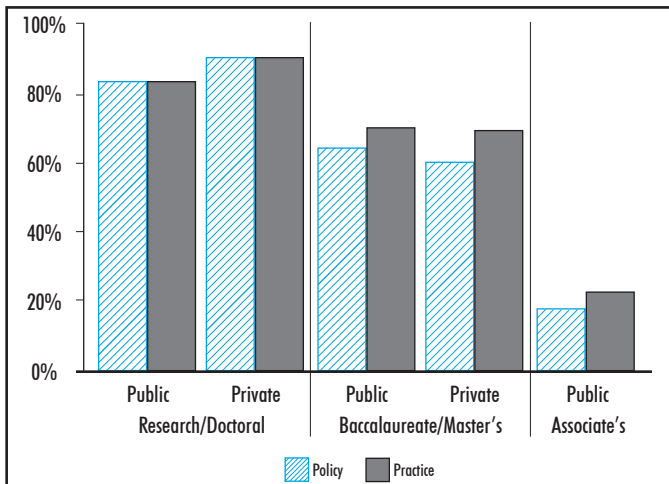
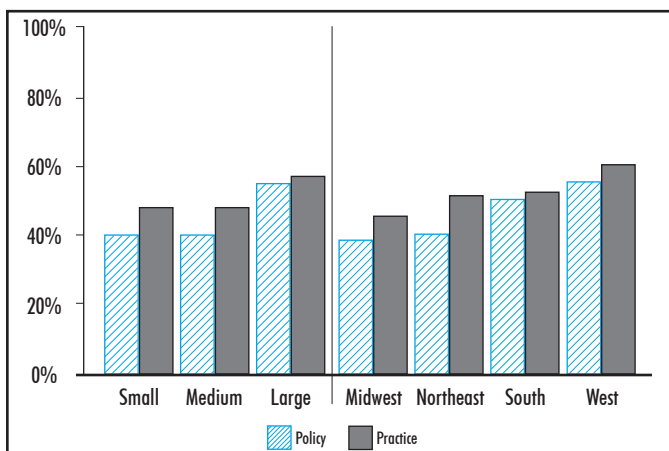


Figure C.8. International Baccalaureate policy and practice, by control and institutional type



Note: Cells with fewer than five responses are not displayed.

Figure C.9. International Baccalaureate policy and practice, by size and region



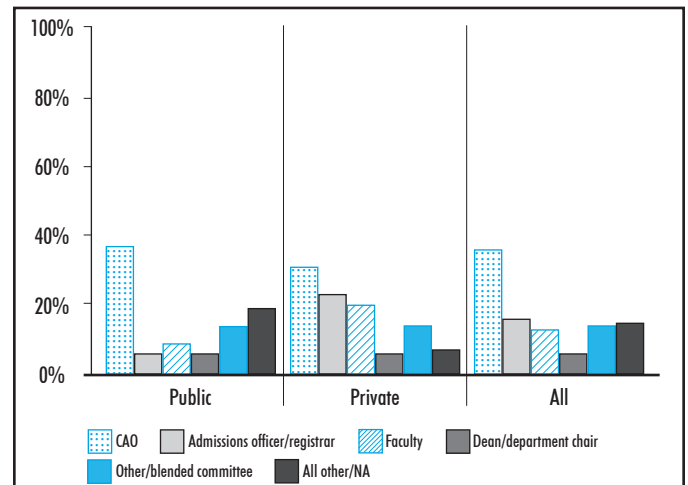
and/or credit purposes than it is for them to have written policies. Associate's-level institutions are the least likely to report having written IB policies and engaging in IB practice (Figure C.8).

Large institutions are more likely than small and medium-sized institutions to report having written IB policies and IB practice. Larger shares of institutions from the West report such policies and practice (Figure C.9).

Responsibility for Determining Accelerated Learning Admissions Policy

Institutions were asked, "Who determines the accelerated learning admissions policy at your institution?" Responses indicate that institutions spread the responsibility for determining accelerated learning admissions policy across many different institutional officers. Slightly more than one-third (36 percent) of all responding institutions report that the chief academic officer is responsible for determining accelerated learning admissions policy (Figure C.10).

Figure C.10. Who determines accelerated learning admissions policy, by control



For the remaining two-thirds of institutions, responsibility for accelerated learning admissions policy is dispersed across admissions offices/registrars, faculty, and various academic and administrative officers functioning in their individual capacities or in blended committees.² The major variations from this overall pattern are at associate's institutions, where the CAO is identified as having more responsibility for accelerated learning admissions policy than other campus officers (and also has more responsibility for this function than CAOs at other types of institutions). Also, research/doctoral institutions report relying on admissions officers and registrars to determine accelerated learning admissions policy more than other types of institutions (Table C.2).

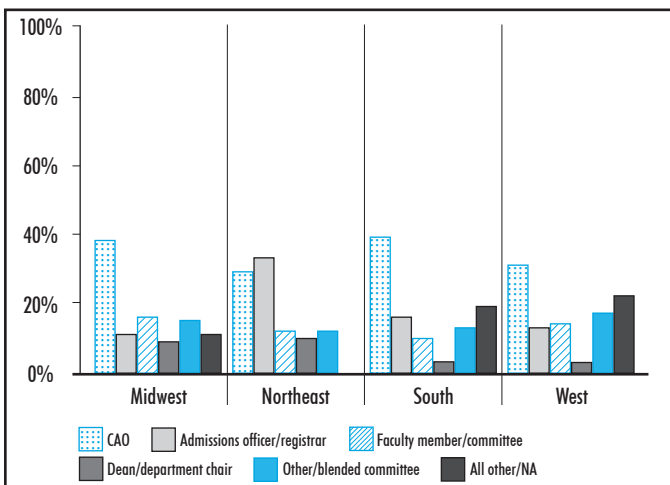
Table C.2. Who determines accelerated learning admissions policy, by institutional type

	Research/ Doctoral (%)	Baccalaureate/ Master's (%)	Associate's (%)
Chief academic officer	20	31	46
Admissions officers/ registrars	25	19	10
Faculty	15	21	4
Blended committees	17	15	12
Deans/department chairs	7	6	6
Other/NA*	15	8	22

*Includes a variety of other administrators, system and state officers, and not applicable responses.

Public research/doctoral institutions spread the accelerated learning admissions policy responsibility across admissions officers, chief academic officers, blended committees, and faculty members, with no one group identified by more than 22 percent of these institutions. In contrast, one-third of private research/doctoral institutions place this responsibility with the admissions officer. Nearly one-third (31 percent) of public and private baccalaureate/master's institutions identify their CAO as having accelerated learning admissions policy responsibility; the remainder disperse it across faculty and other institutional officers. More medium-sized institutions (46 percent) than small (33 percent) or large (29 percent) report relying on their CAO for accelerated learning admissions policy. Institutions from the Northeast tend to assign the accelerated learning admissions policy responsibility to the admissions officer (33 percent) or to the CAO (29 percent). However, institutions from the South, Midwest, and West identify the CAO as the source of accelerated learning admissions policy, with no other administrator or faculty coming in a close second (Figure C.11).

Figure C.11. Who determines accelerated learning admissions policy, by region



Note: Cells with fewer than five responses are not displayed.

Responsibility for Determining How Accelerated Learning Credit Is Treated in the Admissions Process

Institutions were asked, "Who makes the decision on how accelerated learning credit is treated in the admissions process at your institution?" In general, responses indicate that responsibility for determining how accelerated learning credit is treated in the admissions process is spread across three groups: admissions officers, chief academic officers, and a cluster that includes faculty and academic administrators acting as individuals or in various committees. A smaller, fourth category includes other campus and state/system administrators and "not applicable" responses (Table C.3).

Table C.3. Who decides how accelerated learning credit is treated in the admissions process, all institutions

Admissions officers/registrars	34%
Chief academic officers	29%
Faculty/blended committees/academic admin.	28%
Other/NA*	10%

*Includes a variety of other administrators, system and state officers, and "not applicable" responses.

Forty-one percent of all research/doctoral institutions report placing responsibility for determining how accelerated learning credit is treated in the admissions process with admissions officers or registrars (Table C.4). Fifty percent of private research/doctoral institutions report placing this responsibility with admissions officers or registrars, compared with 37 percent of their public counterparts. Approximately one-third of public and private baccalaureate/master's institutions assign this responsibility to admissions/registrar officers. As was the case for determining accelerated learning admissions policy, the largest share (38 percent) of all associate's institutions indicate that the chief academic officer is responsible for determining how accelerated learning credit is treated in the admissions process (Table C.4).

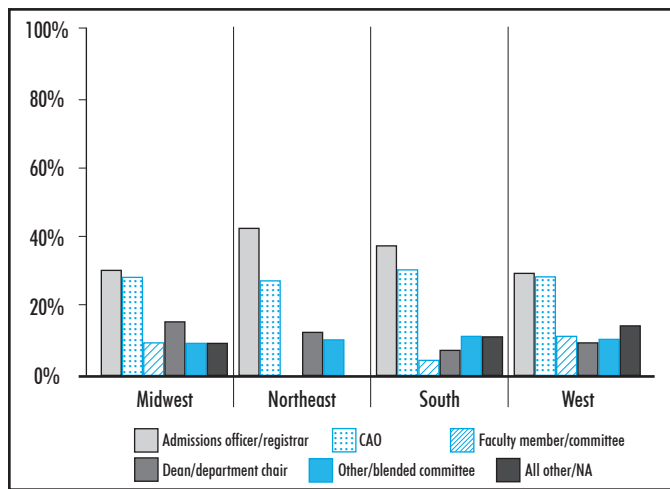
Table C.4. Who decides how accelerated learning credit is treated in the admissions process, by institutional type

	Research/ Doctoral (%)	Baccalaureate/ Master's (%)	Associate's (%)
Admissions officers/ registrars	41	35	31
Chief academic officers	17	23	38
Faculty	14	9	2
Deans/department chairs	10	14	7
Blended committees	10	12	8
Other/NA*	9	7	15

*Includes a variety of other administrators, system and state officers, and "not applicable" responses.

Institutional size makes little or no difference as far as where institutions lodge responsibility for the treatment of accelerated learning credit in the admissions process. Large, small, and medium-sized institutions all tend to place this responsibility with the CAO or admissions/registrar officers (or both). The same reliance on CAOs and admissions/registrar officers is found when we look at the issue by region. A slightly larger share of institutions from the Northeast (42 percent) and the South (37 percent) identify the admissions/registrar officers as the responsible parties than do institutions from other regions of the country (Figure C.12).

Figure C.12. Who determines how accelerated learning credit is treated for admissions purposes, by region



Note: Cells with fewer than five responses are not displayed.

Responsibility for Determining How Accelerated Learning Credit Applies

Institutions were asked, “Who is responsible for deciding how accelerated learning credit will apply?” Responses indicate that responsibility for determining how accelerated learning credit applies to student

Table C.5. Who decides how accelerated learning credit will apply, all institutions, by institutional control

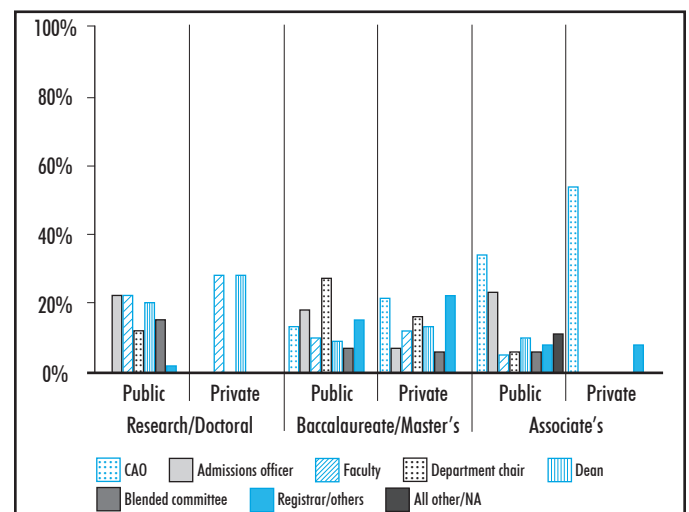
	Public (%)	Private (%)	All (%)
Chief academic officers	23	22	23
Admissions officers	22	7	17
Registrars and others	9	20	13
Department chairs	12	14	13
College/school deans	10	15	12
Faculty	8	13	10
Blended committees	8	6	7
Others & NA	7	3	6

*Includes a variety of other administrators, system and state officers, and “not applicable” responses.

records is even more dispersed than is the authority for determining accelerated learning admissions policy and the treatment of accelerated learning in the admissions process. Table C.5 displays responses from all public and private institutions.

As Figure C.13 shows, public research/doctoral institutions spread the responsibility for determining how accelerated learning credit applies across admissions officers, faculty, deans, blended committees, and department chairs. Figure C.13 also highlights how other types of institutions handle this responsibility. Private research/doctoral institutions are more likely to place this responsibility with faculty and deans. Public and private baccalaureate/master’s institutions place it with a variety of officers: the public sector relies somewhat more on department chairs, while the private sector relies more on registrars and CAOs. Associate’s institutions are more likely than other types of institutions to place this responsibility primarily with CAOs (Figure C.13). It is useful to note that the comments added to answers for this question indicate that the officer(s) responsible for determining how accelerated learning credit applies to a student’s record often consult with other academic administrators and/or faculty in order to reach a determination.

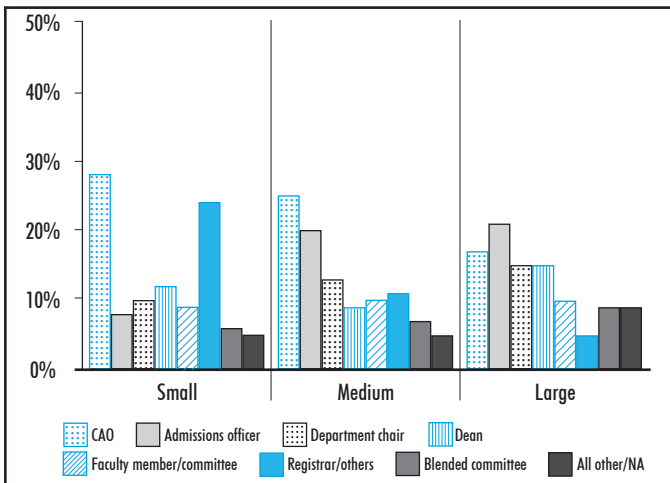
Figure C.13. Responsibility for determining how accelerated learning credit applies, by control and institutional type



Note: Cells with fewer than five responses are not displayed.

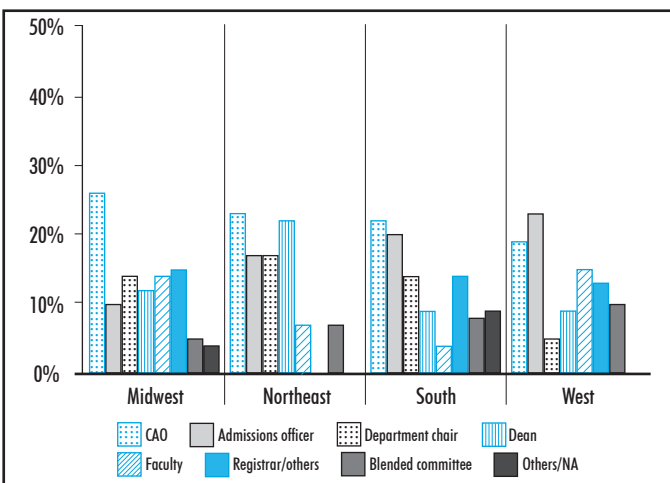
Small institutions tend to rely on their CAOs and registrars to determine how accelerated learning credit applies. Large institutions report a dispersion of this responsibility across administrators and faculty, as well as more reliance on admissions officers. Medium-sized institutions report primary reliance on CAOs and admissions officers (Figure C.14).

Figure C.14. Responsibility for determining how accelerated learning credit applies, by size



Institutions in the Northeast are somewhat more likely than those in other regions to place the responsibility for determining how accelerated learning credit applies with four groups: CAOs, admissions officers, department chairs, and deans. In the Midwest, about one-fourth (26 percent) of institutions associate this responsibility with the CAO. Institutions in the West and South are a little more likely to rely on the CAO and admissions officers. Although never the primary group given the responsibility for determining how accelerated learning credit applies to student records, faculty are most often associated with it by respondents in the West (15 percent) and Midwest (14 percent) and least associated with this function by respondents from the Northeast (7 percent) and the South (4 percent) (Figure C. 15).

Figure C.15. Responsibility for determining how accelerated learning credit applies, by region



Note: Cells with fewer than five responses are not displayed.

Summary: Part A

It is very common for higher education institutions to have AP and dual/concurrent enrollment policies, but less common for institutions to have International Baccalaureate and Tech-Prep policies. Accelerated learning policy and practice go together; institutions that engage in the practice of considering accelerated learning options for purposes of admissions nearly always have written policies. Within the higher education community, there is not a common institutional source of responsibility for determining accelerated learning policy, deciding how accelerated learning credit is treated in the admissions process, and/or determining how accelerated learning credit is applied to the student record. These responsibilities are spread across chief academic officers, admissions officers, registrars, department chairs, deans, faculty, faculty/administrative committees, and other administrators, and in some cases involve system and state officers.

Part B: Institutional Policies and Practices Related to Admissions and the Application of Postsecondary Credit

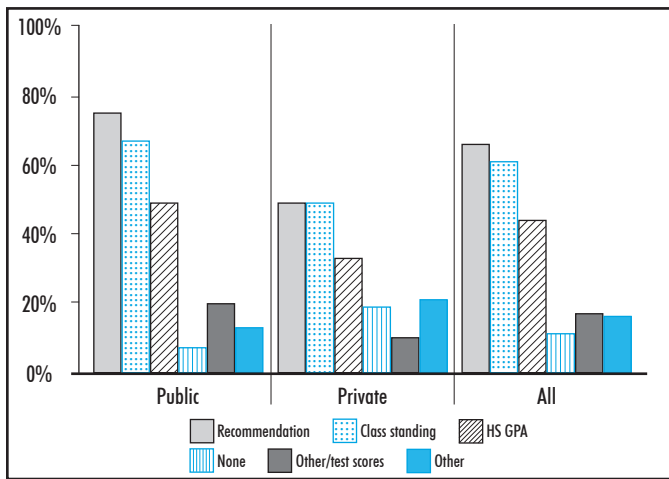
There are several decision points at the institutional level concerning accelerated learning credit. Key areas involve the admissions process and determining whether credit for accelerated courses is awarded and how. This section summarizes responses to several questions that seek more detailed information on these aspects of institutional policies and practices.

Admissions

Dual/concurrent enrollment: minimum requirements. Institutions were asked to identify the “minimum requirements for a high school student to participate in dual/concurrent enrollment programs.” This question focused on institutional requirements, not those established by state policies. Respondents could identify more than one requirement.

The most prevalent requirement reported by two-thirds of all responding institutions is a “recommendation from a high school counselor, teacher, or principal” (Figure C. 16). This requirement is closely followed by “class standing as a junior or senior.” The third most common reported requirement is a specific high school grade point average. As Figure C. 16 shows, public institutions are more likely to report these three major requirements than are private institutions. Eleven percent of all institutions and 19 percent of private institutions report no minimum requirements. Within the private sector, baccalaureate/master’s institutions are the most likely to report no minimum requirements.

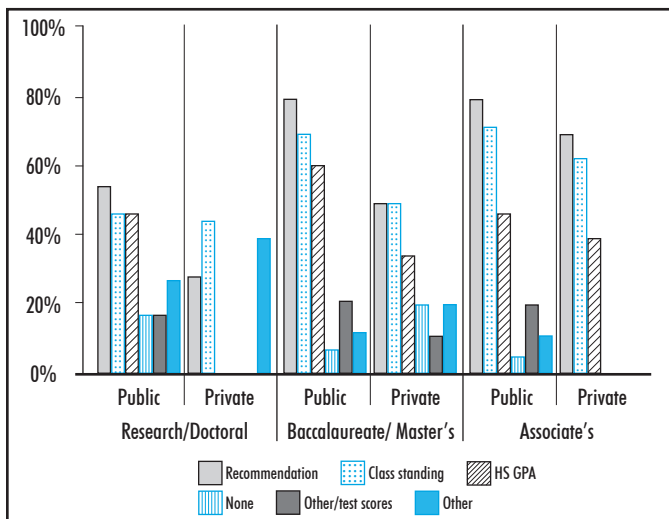
Figure C.16. Minimum requirements for dual/concurrent enrollment, by control



Under “other” requirements, 17 percent of all institutions report test score performance and mention SAT, PSAT, ACT, Asset, Compass, and other placement tests. The remaining “other” responses include roughly 10 percent of institutions that specify requirements such as an interview, course prerequisites, parental/guardian consent, instructor permission, student age, or class rank. And another 6 percent of institutions indicate that this issue is not applicable to their institution.

Nearly 80 percent of public baccalaureate/master’s and associate’s institutions report requiring the recommendation of a high school official and approximately 70 percent require class standing as a junior or senior for a student to enroll in dual/concurrent courses (Figure C.17). And larger shares of public baccalaureate/master’s institutions report requiring a specific high school GPA than do other types of institutions. Private research/doctoral institutions

Figure C.17. Minimum requirements for dual/concurrent enrollment, by control and institutional type

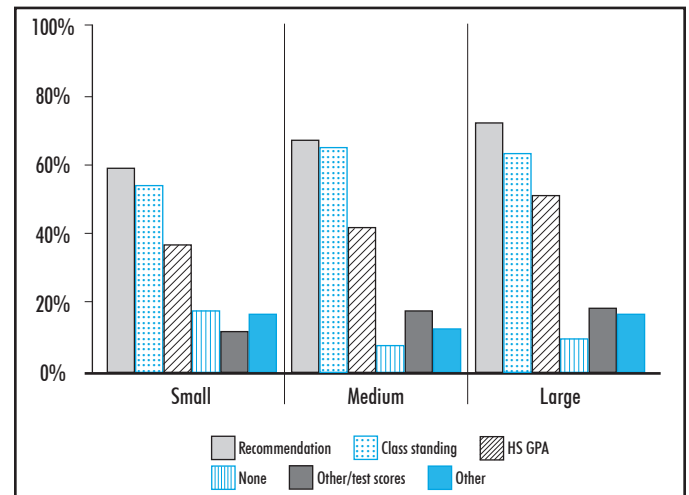


Note: Cells with fewer than five responses are not displayed.

are the least likely to report requiring a high school recommendation; these institutions are more likely to rely on class standing as a junior or senior and a variety of other requirements for students wishing to enroll in dual/concurrent courses. No one requirement for participating in dual/concurrent enrollment stands out from the others in responses from public research/doctoral institutions. Their requirements can include a high school recommendation, junior or senior class standing, a specific GPA, or other requirements (Figure C.17).

Requirements for dual/concurrent enrollment vary little by size of institution, except that larger institutions are a little more likely to report requiring a recommendation from a high school official, class standing, and a specific GPA than are small institutions (Figure C.18).

Figure C.18. Minimum requirements for dual/concurrent enrollment, by size

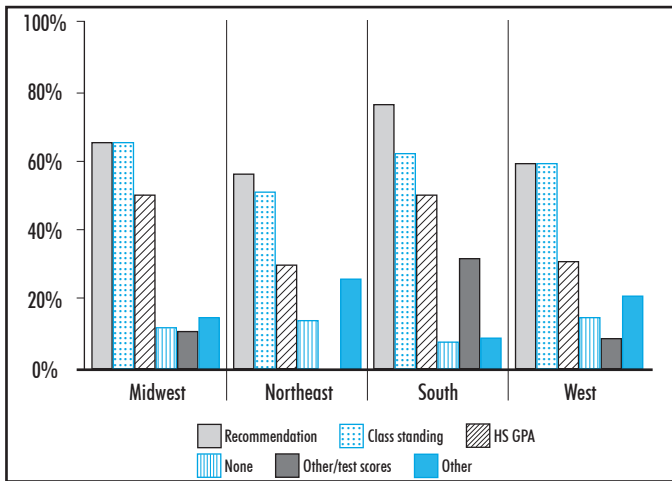


There is some variation in requirements by regional location. Seventy-six percent of institutions in the South report the “recommendation” requirement. Institutions in the South and Midwest are somewhat more likely to report a high school GPA requirement than are institutions in the Northeast and West (Figure C.19).

How accelerated learning options enhance admissions prospects. Recognizing that some institutions add weight to a student’s high school grade point average for achievement associated with various accelerated learning options, institutions were asked whether, over and above this practice, evidence of participation in accelerated learning options enhances a student’s chance for admission.

For the higher education community as a whole, accelerated learning options appear to have limited impact on enhancing admissions prospects. Table C.6

Figure C.19. Minimum requirements for dual/concurrent enrollment, by region



Note: Cells with fewer than five responses are not displayed.

Table C.6. The chances of accelerated learning options enhancing admissions prospects, all institutions, by control

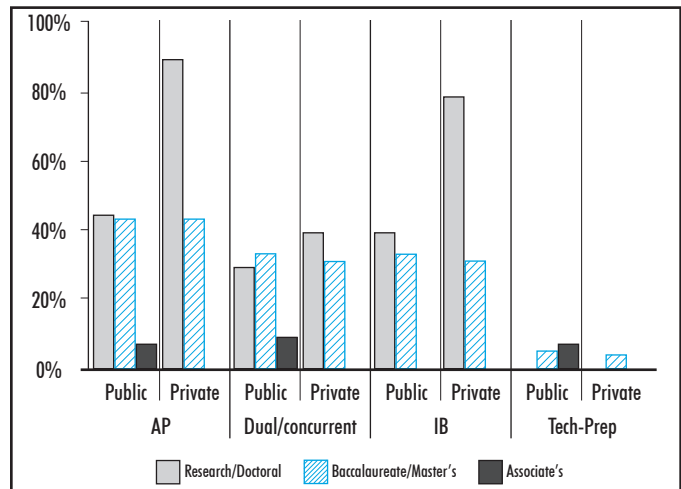
	Public (%)	Private (%)	All (%)
Advanced Placement	21	48	30
Dual/concurrent enrollment	18	32	23
International Baccalaureate	15	34	22
Tech-Prep	6	4	5

displays the shares of all institutions reporting that they give preference to students who have enrolled in accelerated learning options.

However, survey results vary considerably by institutional control and type. As Table C.6 indicates, private institutions are more likely than public institutions to enhance admissions prospects for students who have taken AP, dual/concurrent, or IB courses. Very few institutions, private or public, indicate that admissions chances are enhanced for students who have taken Tech-Prep courses. The largest number of institutions (14) reporting such preference are public associate’s institutions. Twelve percent of all associate’s institutions report that this question does not apply due to their open enrollment practice.

The variation in admissions prospects by institutional type and control for AP, dual/concurrent, and IB options is displayed in Figure C.20. Private research/doctoral institutions are twice as likely to give admissions preference to those with AP and IB courses as are public research/doctoral institutions. Less than half of public research/doctoral institutions give preference for AP courses, and even smaller shares report giving preference for dual/concurrent or IB courses. At the baccalaureate/master’s level, there is little variation between the public and private sectors (Figure C.20).

Figure C.20. Accelerated learning options enhance admissions prospects, by control and institutional type



Note: Cells with fewer than five responses are not displayed.

Institutional responses indicate that there is almost no variation in preference given to applicants for any of the accelerated learning options based on institutional size. Institutions in the Northeast region are somewhat more likely to report admissions preference for students with AP, dual/concurrent, and IB courses than are institutions from other regions of the country.

Admissions preference and AP performance.

Institutions were asked, other factors being equal, whether they give preference for admissions purposes to students based on four different AP performance standards. The shares of all institutions saying “yes” to each of the four performance standards listed in the survey (described here as performance standards 1-4) are as follows:

- *Performance standard 1.* Preference to students taking AP courses and performing satisfactorily, using the standards defined by the institution (30 percent).
- *Performance standard 2.* Preference to students taking AP tests and performing satisfactorily using College Board standards, i.e., received a grade of 3, 4, or 5 (29 percent).
- *Performance standard 3.* Preference to students whose high school GPA was enhanced by participating in AP courses (25 percent).
- *Performance standard 4.* Preference to students taking AP courses without regard to the grade the student achieved (12 percent).

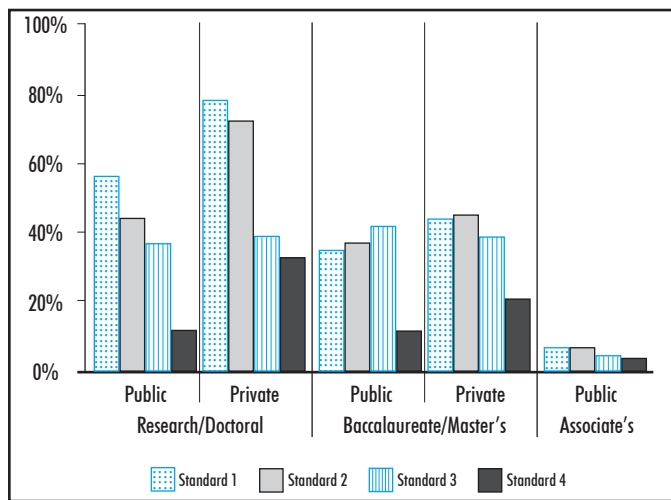
As Table C.7 shows, private institutions are more likely to give admissions preference for each of the four performance standards than are public institutions. Research/doctoral institutions are the most likely to give admissions preference using standards 1 and 2 (Figure C.21); however, within this institutional

Table C.7. Admissions preference associated with Advanced Placement performance standards, all institutions, by control

	Public (%)	Private (%)	All (%)
1. AP institutional standards	21	46	30
2. AP College Board standards	20	46	29
3. AP enhanced high school GPA	19	38	25
4. AP without regard for grade	7	22	12

type, there is variation between the public and private sectors. More than three-fourths of private research/doctoral institutions report giving admissions preference using standard 1, and nearly three-fourths do so using standard 2. As Figure C.21 shows, the shares of public research/doctoral institutions reporting admissions preference based on standards 1 and 2 are considerably lower. There is less difference in the shares of public and private baccalaureate/master’s institutions giving admissions preference based on standards 1, 2, and 3. Very small shares of public associate’s institutions report giving admissions preference for AP work based on any of the four standards.

Figure C.21. Admissions preference given for Advanced Placement based on performance standards, by control and institutional type



Small institutions and institutions from the Northeast are a little more likely to give admissions preference for each of the four standards than are larger institutions and institutions from other regions of the country.

Application of Credit

Institutional authority for how accelerated learning credit applies. Institutions were asked if the authority for determining how accelerated learning credit applies varies within their institutions. Institutions responded to the four options provided as follows:

- Does not vary – remains consistent throughout the institution (63 percent).
- Varies by program/department within colleges/schools (31 percent).
- Varies by colleges/schools (4 percent).
- Other (2 percent).

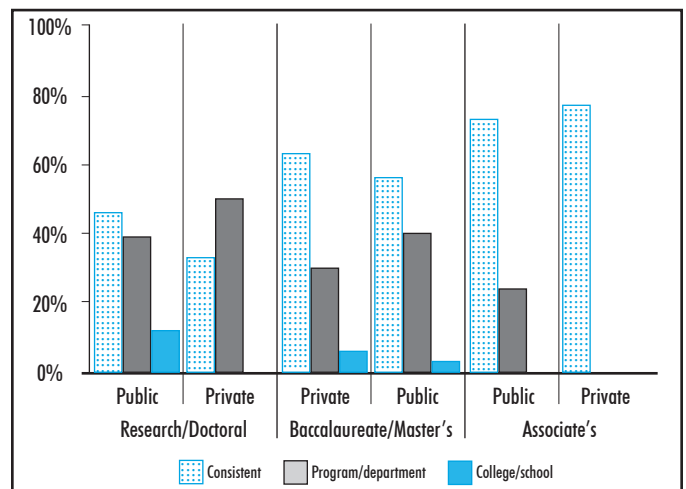
As Table C.8 shows, more public than private institutions report having consistent authority throughout their institutions. When variation occurs, it tends to be by program/department within colleges/schools.

Table C.8. Variation in the authority for determining how accelerated learning credit applies, by control

	Public (%)	Private (%)	All (%)
No, constant throughout	67	55	63
Yes, by program/department within college/schools	27	40	31
Yes, by college/schools	4	5	4

Approximately three-fourths of public and private associate’s institutions report that the authority for determining how accelerated credit applies to student records is consistent throughout their institutions (Figure C.22). More than half of public and private baccalaureate/master’s institutions report consistent authority across their campuses. Private research/doctoral institutions are less likely than other types of institutions to report consistent institutional authority; half of these institutions report that the authority for determining how accelerated credit applies varies at their institutions by program/department within colleges/schools. For baccalaureate/master’s and associate’s institutions, any variation in authority is

Figure C.22. Variation in authority for determining how accelerated learning credit applies, by control and institutional type



Note: Cells with fewer than five responses are not displayed.

nearly always by program/department within colleges/schools (Figure C.22).

Institutional responses indicate that institutional size makes almost no difference in terms of institutional authority for determining how accelerated learning credit applies. Approximately two-thirds of all institutions report that authority for this function is consistent throughout their institutions. The share of institutions in the Northeast reporting consistent institutional authority (47 percent) is somewhat lower than those in other regions of the country (South, 69 percent; Midwest, 67 percent; and West, 58 percent).

Accelerated learning credit and timing. Institutions were asked, “When is a student with accelerated learning credit informed that the credit is accepted?” and “When is a student informed of how the credit has been applied?” Institutional responses are summarized in Table C.9.

In general, and as might be expected, students tend to be informed earlier in the admissions/enrollment process about the acceptance of accelerated learning credit and later in that process about the application of their accelerated learning credit. The most common pattern for all responding institutions is to inform students that their accelerated learning credit has been accepted and how it will be applied “after an offer of admission, but before enrollment” (Table C.9).

Table C.9. When accelerated learning is accepted and applied, all institutions

	Credit Accepted (%)*	Credit Applied (%)*
Before enrollment	73	62
Before an offer of admission is made	12	5
Other transparent**	3	2
At the time an offer of admission is made	15	9
After an offer of admission is made	43	45
After enrollment	17	30
Other: varies/open door***/NA	10	8

*Components do not add to the total due to rounding.

**Small shares of institutions report that the acceptance of accelerated learning credit and how it applies is transparent because performance criteria are available in publications or on websites, making this information available before enrollment.

***Open door institutions may make it known how they handle the acceptance and application of accelerated learning options before a student enrolls, but survey results do not permit a test of this assumption.

Combining the three response categories that span the “before enrollment” time frame with the transparency category helps capture the differences in accelerated learning acceptance and application practice between the public and private sectors (Figure C.23) and by institutional type (Figure C.24). More than 70 percent of all responding institutions indicate that they inform students of the acceptance of accelerated learning credit and more than 60 percent indicate that they inform students how that credit will be applied at some

Figure C.23. When students are informed that accelerated learning credit is accepted/applied, by control

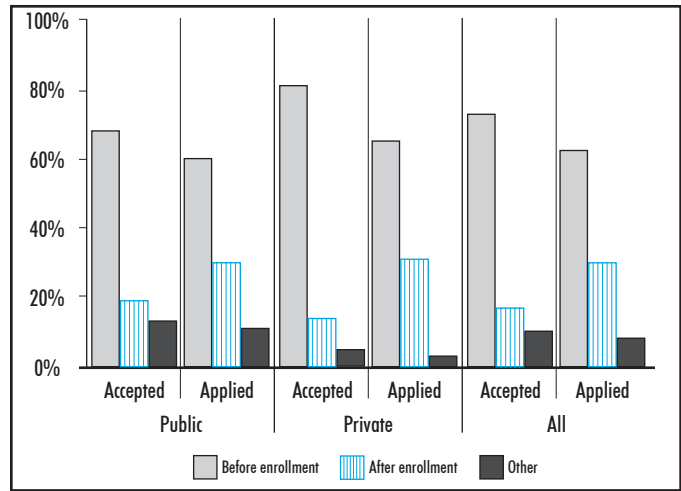
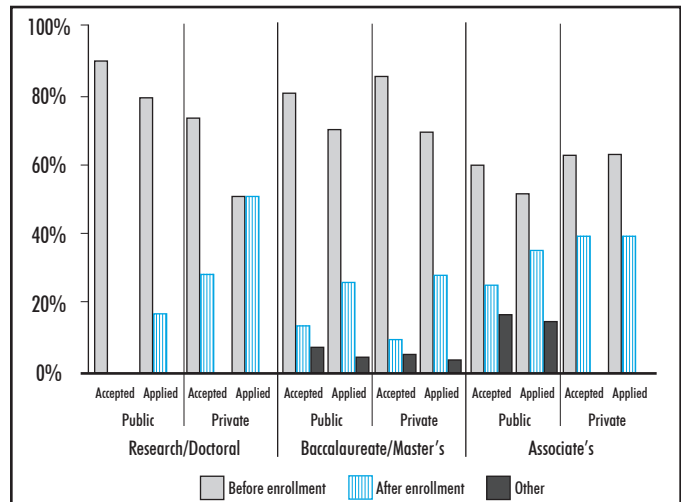


Figure C.24. When students are informed that accelerated learning credit is accepted/applied, by control and institutional type



Note: Cells with fewer than five responses are not displayed.

stage of the admissions process before enrollment takes place (Figure C.23). The private sector is more likely than the public sector to notify students at some stage before enrollment that accelerated learning credit will be accepted, but about two-thirds of all institutions indicate they do this; 30 percent inform students about the application of accelerated learning credit after enrollment (Figure C.23).

A larger share of public research/doctoral institutions report informing students before enrollment of the acceptance (88 percent) and application (78 percent) of accelerated learning credit than do their private counterparts. Fifty percent of private research/doctoral institutions report informing students about how accelerated learning credit applies before enrollment (Figure C.24). A somewhat different picture emerges for baccalaureate/master’s institutions.

A slightly larger share of private baccalaureate/master’s institutions report informing students before enrollment that their accelerated learning credit will be accepted than do public baccalaureate/master’s institutions (Figure C.24). Public associate’s institutions are the most likely to indicate that the timing for both informing students of accelerated learning credit acceptance and how accelerated learning credit applies varies, depending on document submission and other reasons; this category accounts for most of the difference between public and private associate’s institutions (Figure C.24).

Overall, institutional size makes minimal difference in the pattern of responses for the acceptance of accelerated learning credit (Figure C.25). A somewhat smaller share of institutions from the West report informing students before they enroll that their accelerated learning credit is accepted and how it will apply than do institutions from the Midwest, Northeast, or South (Figure C.26).

Figure C.25. When students are informed that accelerated learning credit is accepted/applied, by size

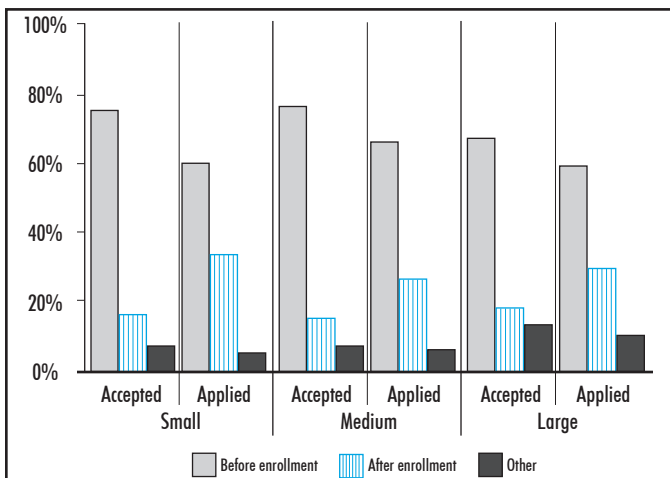
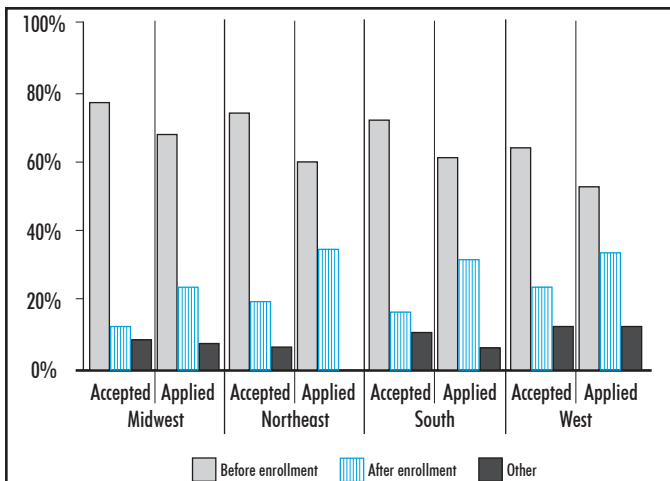


Figure C.26. When students are informed that accelerated learning credit is accepted/applied, by region



Accelerated learning credit: elective or required. As Table C.10 shows, 73 to 91 percent of all institutions report accepting AP and dual/concurrent courses for either elective or required credit, and these courses are somewhat more likely to be accepted for required than elective credit. Considerably smaller shares of all institutions report accepting IB or Tech-Prep courses for either elective or required credit. The major difference between the public and private sectors is that the public sector is more likely to accept dual/concurrent and Tech-Prep courses for elective or required credit, while the private sector is more likely to accept IB courses for elective or required credit (Table C.10).

Table C.10. Share of all institutions that report granting elective or required credit for accelerated learning options, by institutional control

	Public (%)	Private (%)	All (%)
Advanced Placement			
Elective	75	80	77
Required	91	92	91
Dual/concurrent enrollment			
Elective	77	67	73
Required	92	78	87
International Baccalaureate			
Elective	39	60	46
Required	40	63	48
Tech-Prep			
Elective	48	20	39
Required	53	12	39

Advanced Placement credit. About 90 percent of all types of institutions report accepting AP courses for required credit. The four-year public and private sectors were somewhat more likely than public and private associate’s institutions to report accepting AP courses as elective credit (Figure C.27). The pattern of approximately three-fourths of all institutions accepting AP courses for elective credit and approximately 90 percent accepting these courses as required credit varies little by size of institution (Figure C.28) or region of the country (Figure C.29).

Dual/concurrent credit. Within the public sector, there is almost no variation by institutional type in the shares of institutions reporting acceptance of dual/concurrent credit as elective or required (Figure C.27). A considerably smaller share of private research/doctoral institutions (50 percent) reports accepting dual/concurrent courses for required credit, compared with over 90 percent of their public counterparts. But more than 80 percent of both private and public baccalaureate/master’s and associate’s institutions report accepting dual/concurrent courses for required credit (Figure C.27).

Figure C.27. Share of institutions granting elective or required credit for Advanced Placement and dual/concurrent options, by control and institutional type

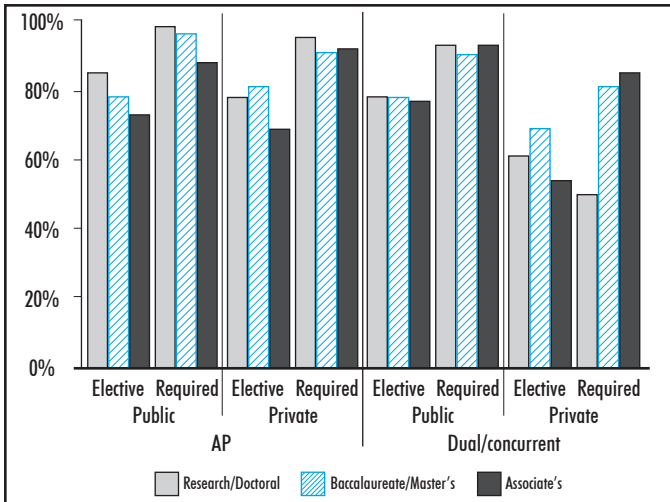


Figure C.28. Share of institutions granting elective or required credit for accelerated learning credit, by size

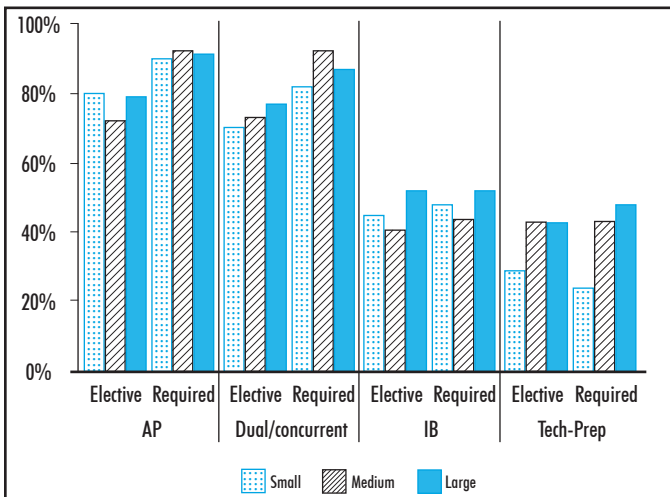
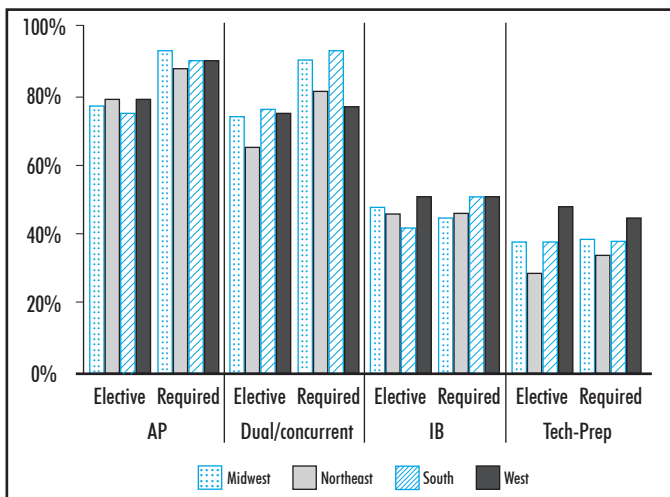


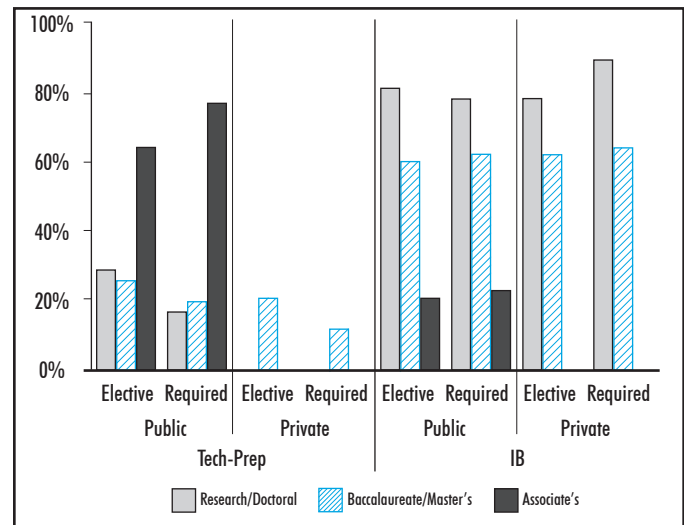
Figure C.29. Share of institutions granting elective or required credit for accelerated learning credit, by region



The pattern of acceptance of dual/concurrent credit does not vary much by size of institution, but in general smaller institutions are a little less likely than larger ones to grant elective or required credit for dual/concurrent courses (Figure C.28). Institutions from the Northeast are somewhat less likely than those from other regions to report accepting dual/concurrent courses for elective credit. And institutions from the Midwest and South are somewhat more likely to grant required credit for dual/concurrent courses than are those from the Northeast or the West (Figure C.29).

Tech-Prep credit. The practice of accepting Tech-Prep courses for either elective or required credit is found primarily in the public sector and at public associate's institutions. Much smaller shares of public research/doctoral and public baccalaureate/master's institutions report accepting Tech-Prep courses for elective credit (Figure C.30).

Figure C.30. Share of institutions granting elective or required credit for Tech-Prep and International Baccalaureate options, by control and institutional type



Cells with fewer than five responses are not displayed.

Medium and large institutions are more likely to report accepting Tech-Prep courses as elective or required credit than are small institutions (Figure C.28). Institutions in the West are more likely to report accepting Tech-Prep courses as elective or required credit; institutions in the Northeast are the least likely to report these practices (Figure C.29).

International Baccalaureate credit. Over three-fourths of public and private research/doctoral institutions report accepting IB courses for either elective or required credit. Approximately two-thirds of public and private baccalaureate/master's institutions and much smaller shares of public associate's institutions report accepting IB courses as either elective or required credit (Figure C.30). Large institutions are a little more likely than small ones to report accepting IB courses as

elective or required credit (Figure C.28). Institutions from the South are a little less likely than those from other parts of the country to accept IB courses as elective credit. But in general institutional responses suggest that regional location has minimal impact on the acceptance of IB courses for either elective or required credit (Figure C.29).

International Baccalaureate diploma as equivalent to college-level work. Institutions were asked if they accepted “an International Baccalaureate diploma as equivalent” to either the first year or the first and second years of college. They were also given the option of indicating that they did not accept the IB diploma as equivalent to college-level work. More than half of all institutions indicate that they do not accept the IB diploma as equivalent to college-level work. Less than a third accept it as the equivalent of the first year of college, and 15 percent accept it as equivalent to the first and second years of college (Table C.11).

Table C.11. Acceptance of International Baccalaureate diploma, by control

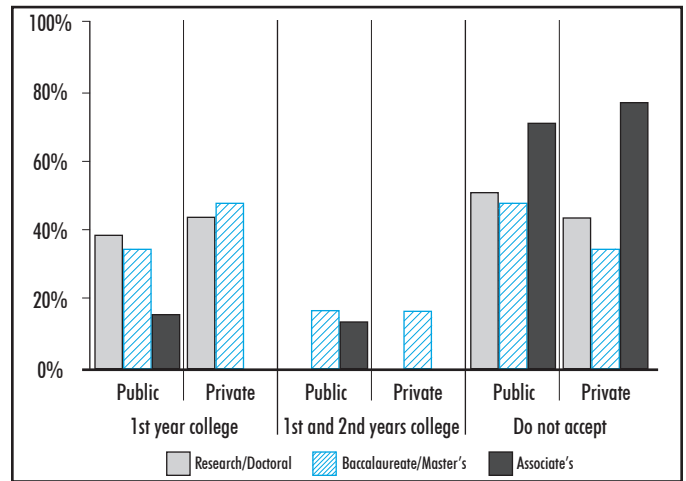
	Public (%)	Private (%)	All (%)
First year of college only	24	45	31
First and second years of college	14	16	15
The institution does not accept an IB diploma as equivalent to college-level work	62	39	54

Public and private research/doctoral and baccalaureate/master’s institutions are the most likely to accept the IB diploma for the first year of college. Very small shares of all master’s/baccalaureate institutions accept the IB diploma as equivalent to the first *and* second years of college. Associate’s institutions are the most likely to report *not* accepting the IB diploma as equivalent to any college-level work (Figure C.31).

The pattern of acceptance of the IB diploma does not vary by size of institution, and variation by region is minimal. Institutions from the West and Northeast are a little more likely to accept the IB diploma as equivalent to the first year of college than are institutions from other parts of the country.

How accelerated learning credit appears on transcripts. Institutions were asked to indicate whether accelerated learning credit appears on transcripts the “same as other credit” or with a “designation that distinguishes it from other credit.” More than half of all institutions report that accelerated learning credit receives a special designation on their transcripts. Public institutions are evenly split on this matter, while nearly two-thirds of private institutions use a special designation for accelerated learning credit (Table C.12).

Figure C.31. Acceptance of the International Baccalaureate, by control and institutional type



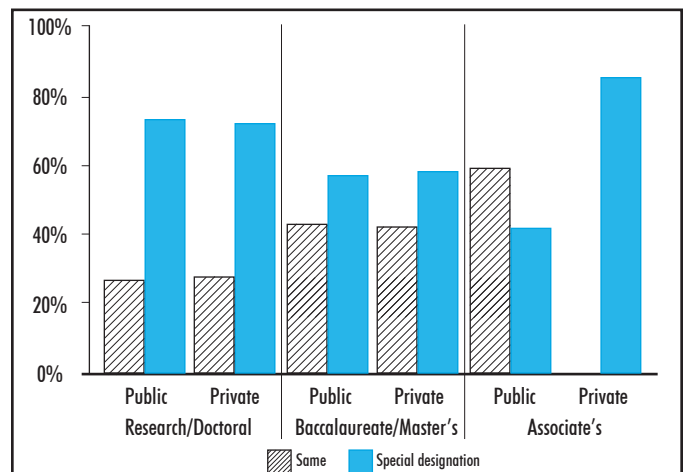
Cells with fewer than five responses are not displayed.

Table C.12. How accelerated learning appears on transcripts, all institutions, by control

	Public (%)	Private (%)	All (%)
Special designation	50	62	54
Same as other credit	50	38	46

Nearly three-fourths of public and private research/doctoral institutions and more than half of baccalaureate/master’s institutions report using special designations. Public associate’s institutions are the most likely to treat accelerated learning credit the same as other credit on transcripts, followed by baccalaureate/master’s institutions; research/doctoral institutions are the least likely to do so. A high percentage of private associate’s institutions (but only 11 schools in number) report the use of special designations (Figure C.32).

Figure C.32. How accelerated learning credit appears on transcripts, by control and institutional type



Cells with fewer than five responses are not displayed.

Medium-sized institutions (46 percent) are somewhat less likely to report using a special transcript designation than are small (60 percent) and large (56 percent) institutions. Institutions from the Midwest (54 percent) are more likely than institutions from the South (40 percent) or other regions to report that accelerated learning credit appears on transcripts the *same* as other credit.

Summary: Part B

Across all higher education institutions, participation in accelerated learning options has limited impact on admissions prospects. Private research/doctoral institutions are the most likely to enhance admissions prospects for those who meet AP performance standards or who have taken dual/concurrent or IB courses. The public sector is more likely than the private to have minimum requirements for dual/concurrent enrollment. Over two-thirds of all institutions inform students at some stage before enrollment about the acceptance and application of accelerated learning credit, and even larger shares of institutions accept AP and dual/concurrent courses for elective or required credit. Tech-Prep courses are the least likely to be accepted for credit, except at public associate’s institutions. The acceptance of IB courses for elective or required credit is fairly common within the four-year higher education community, but it is less likely that these institutions will accept the IB diploma as equivalent to the first year or first and second years of college. When accepting any accelerated learning credit, four-year institutions are likely to use a designation on transcripts that distinguishes it from other credit.

Part C: Institutional Policies and Practices Related to Outreach Programs and Financial Assistance

Understanding the prevalence of outreach programs, the use of distance learning technology, and the availability of targeted financial assistance sheds light on the priority placed on using accelerated learning opportunities to increase higher education access for low-income, disadvantaged populations. Relevant survey responses are summarized below.

Outreach Programs

Accelerated learning outreach. Institutions were asked if they had “an outreach program to notify students, particularly those from low-income, disadvantaged backgrounds, about opportunities for accelerated learning options.” Slightly more than half of all responding institutions indicate that they have accelerated learning outreach programs. The

public sector is more than twice as likely to report having such programs than is the private sector (Figure C.33). More than three-fourths of public associate’s institutions report the existence of accelerated learning outreach programs. About half of public and private research/doctoral institutions indicate that they have such programs, and public baccalaureate/master’s institutions are more than twice as likely as their private counterparts to have accelerated learning outreach programs (Figure C.34).

Large institutions are almost twice as likely as small institutions to report accelerated learning outreach programs. Institutions from the South and West are more likely to report having accelerated learning outreach programs than those from the Midwest and Northeast (Figure C.33).

Figure C.33. Existence of accelerated learning outreach programs, by control, size, and region

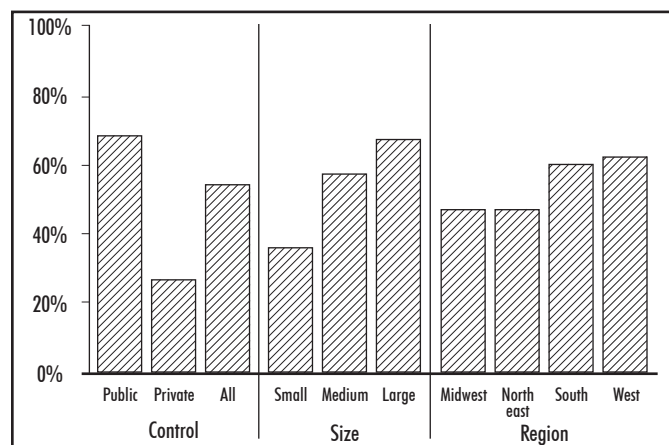
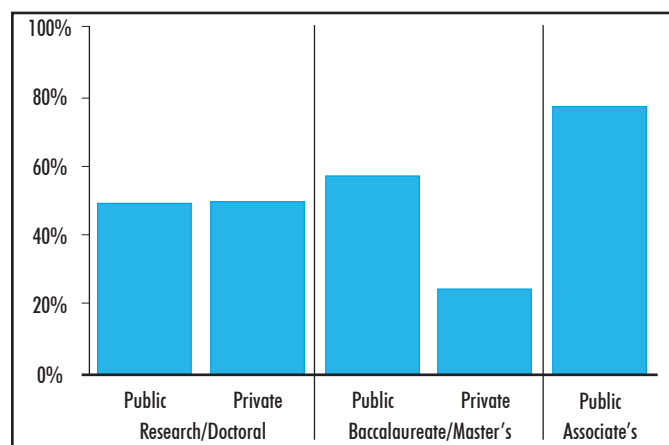


Figure C.34. Existence of accelerated learning outreach programs, by control and institutional type



Cells with fewer than five responses are not displayed.

Where students take accelerated learning courses. Institutions were asked to indicate any of three possible locations where students take each of the

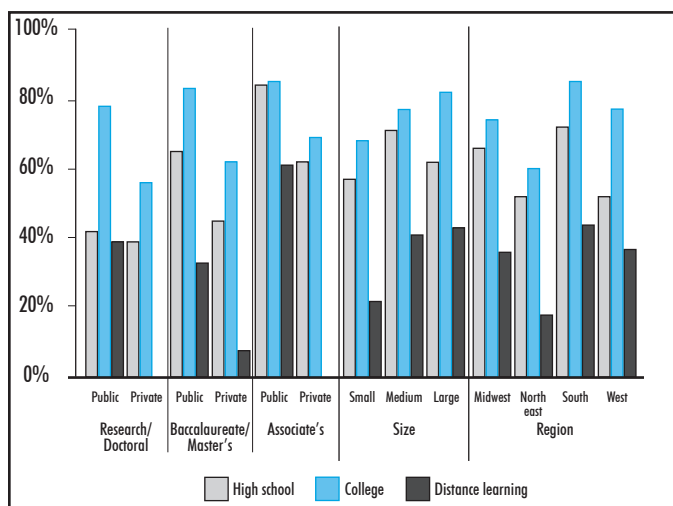
accelerated learning options – at high schools, on college campuses, or by means of distance learning.

Advanced Placement courses. Ninety percent of all institutions report that AP courses are taken at high schools. There is little variation in this finding by institutional control, type, size, or regional location.

Dual/concurrent courses. About three-fourths (76 percent) of all institutions report that dual/concurrent courses are taken on college campuses; two-thirds indicate that they are also taken at high schools. About one-third (36 percent) of all institutions report that dual/concurrent courses are taken by means of distance learning; this is the only accelerated learning option for which institutions make significant use of this mode of delivery.

Approximately 80 percent of all public institutions report college campuses as the location for dual/concurrent courses. High schools are reported as the site of dual/concurrent courses by more public associate’s institutions (84 percent) than other institutional types. Public associate’s institutions are also the most likely to report distance learning as the vehicle for delivering dual/concurrent courses. The shares of institutions reporting all three sites as the location for dual/concurrent courses increase as institutions get larger. Institutions from the Northeast are less likely than those from other regions to report college campuses as the site of dual/concurrent courses, and they are much less likely to indicate that distance learning is the means for offering dual/concurrent courses (Figure C.35).

Figure C.35. Where dual/concurrent courses are taken, by control, institutional type, size, and region

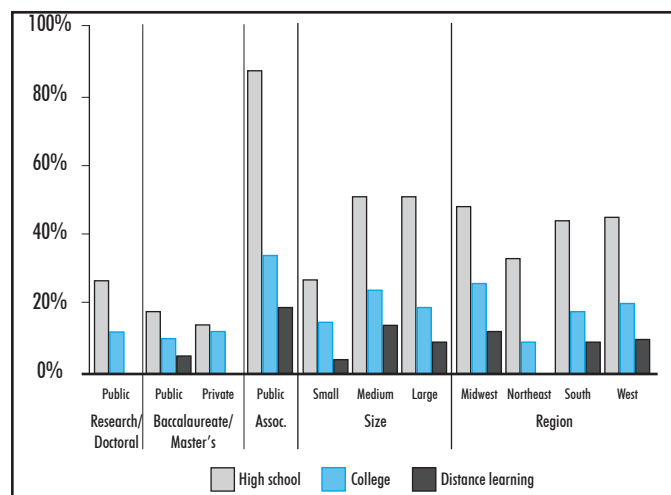


Cells with fewer than five responses are not displayed.

Tech-Prep courses. As discussed earlier, public associate’s institutions are the most likely to report Tech-Prep policy and practice, and 87 percent of these institutions report that high schools are the location

of these courses. Other types of institutions indicate minimal involvement with Tech-Prep. Large and medium-sized institutions are more likely than small institutions to report that Tech-Prep courses are taken at high schools. And institutions from the Northeast are a little less likely than those from other regions to report high schools as the location for Tech-Prep courses (Figure C.36).

Figure C.36. Where Tech-Prep courses are taken, by control, institutional type, size, and region



Cells with fewer than five responses are not displayed.

International Baccalaureate diploma/courses. High schools are identified as the primary location for IB courses by all types of institutions. There is little variation in this finding by institutional size or regional location.

Financial Assistance

Institutions were provided with a list of various types of student financial assistance and were asked if any of these or other forms of financial assistance were “specifically targeted for high school students from low-income, disadvantaged backgrounds who enroll in accelerated learning options.” Institutions could indicate all of the types of aid that apply; responses from all institutions are displayed in Table C.13.

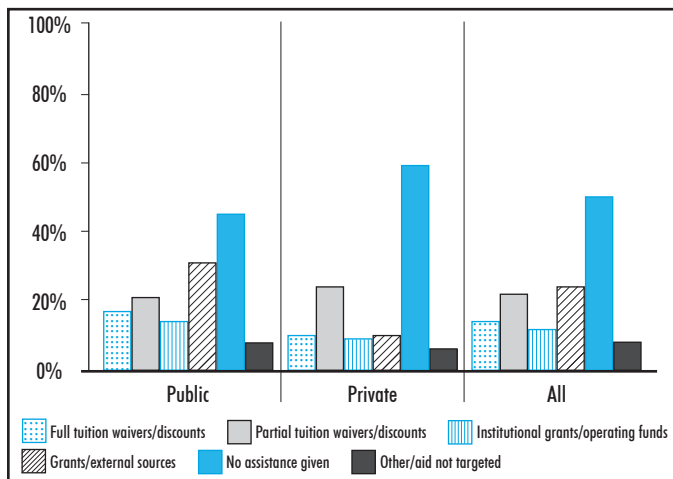
Table C.13. Financial assistance for accelerated learning options, all institutions

No assistance given	50%
Grants from external sources	24%
Partial tuition waivers/discounts	22%
Full tuition wavers	14%
Institutional grants from earmarked funds in the operating budget	12%
Aid given, but not targeted for accelerated learning options	8%

Half of all responses indicate that no aid is targeted for high school students from low-income, disadvantaged backgrounds who enroll in accelerated learning options (Table C.13).

Private institutions are less likely to provide aid than are those in the public sector (Figure C.37). In the public sector, more than half of research/doctoral and baccalaureate/master's institutions report not giving aid, compared with about 40 percent of associate's institutions. Aid given by the public sector is predominantly in the form of grants from external sources; roughly a third of all types of public institutions report this source of aid. The second most common source of public sector aid is partial or full tuition waivers.

Figure C.37. Financial assistance for accelerated learning options, by control



Large institutions are a little more likely to report giving financial assistance (primarily in the form of grants from external sources) than are small and medium-sized institutions. Institutions from the West are a little more likely to report giving assistance than institutions from other regions. The forms of assistance vary somewhat by region. Institutions from the West use full or partial tuition waivers and grants from external sources and provide almost no assistance from institutional grants earmarked in the operating budget. Institutions from the South, Midwest, and Northeast all report some assistance from all of the sources listed.

Summary: Part C

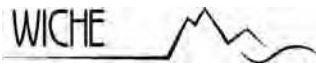
Slightly more than half of all institutions have accelerated learning outreach programs; they are more common in the public sector, at associate's institutions, and at larger institutions. High schools are the usual site for AP, IB, and Tech-Prep courses. Dual/concurrent courses are offered at both high schools and college campuses. Public associate's institutions

are the primary users of distance education to deliver accelerated learning courses. Aid for low-income students from disadvantaged backgrounds enrolling in accelerated learning options is limited. Half of all institutions give no aid, and the aid that is given is from external grants.

Endnotes

¹ The author appreciates the contributions of WICHE staff Cheryl Blanco, Erin Barber, Demarée Michelau, and Brian Prescott in the preparation of this appendix.

² For the purpose of this analysis, a blended committee is a committee composed of both faculty and administrators.



Colleague,

With support from Lumina Foundation for Education, the Western Interstate Commission for Higher Education (WICHE) has undertaken a project looking at the policies and practices around accelerated learning options, and we seek your assistance in understanding the institutional perspective. For purposes of this effort, "accelerated learning" is an umbrella descriptor for advanced learning opportunities such as the College Board's Advanced Placement Program, dual/concurrent enrollment, Tech-Prep, and the International Baccalaureate program. WICHE is a regional organization created to assure access and excellence in higher education for all citizens of the West and to facilitate resource sharing among the higher education institutions, systems, and states (for more information, please visit our Web site at www.wiche.edu).

With great respect for your time, we ask you to complete a short online survey, only 17 questions (followed by a demographic section), which can be accessed at <http://websurveyor.net/wsb.dii/26074/InstitutionalPolicies&Practice.htm>.

If you are not the person to whom this survey should be directed, please forward it to the appropriate individual within your institution, but we can accept only one response from each institution. **Please keep in mind that this is a survey of institutional/campus policies and practices; state policies and practices pertaining to accelerated learning options will be addressed separately.**

After the data are collected and analyzed, WICHE will publish a final report designed to inform policy, education, and research communities about existing state and institutional policies and practices associated with these programs and the efficacy of the programs for students and states. At the end of the survey, you can indicate if you would like to receive an e-mail notification that we have posted the final report to our Web site.

Please complete and return the survey by Tuesday, April 19, 2005. Questions and comments on the survey may be directed to:

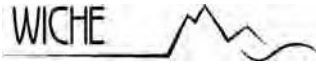
Dr. Colleen O. Sathre or
Vice President Emeritus
University of Hawaii
Consultant
Email: al-wiche@hawaii.edu

Dr. Cheryl Blanco
Director, Policy Analysis and Research, WICHE
Email: cblanco@wiche.edu

We thank you in advance for assisting with this important effort.

Sincerely,

David A. Longanecker
Executive Director
Western Interstate Commission for Higher Education



Survey of Institutional Policies and Practices Related to Accelerated Learning Options

Instructions

1. Please complete the survey that follows; you may need to consult with other offices within your institution. **Each institution should submit only one completed survey.**
2. While completing the survey, keep in mind that this is a survey of **institutional/campus policies and practices**. State policies and practices pertaining to accelerated learning options will be addressed separately.
3. The survey has 17 questions (followed by a demographic section) grouped into five categories:
 - General Institutional Policies and Practices
 - Admission Policies and Practices
 - Credit Assignment Practices
 - Collaboration with High Schools
 - Institutional Financial Assistance for Accelerated Learning Options
4. No personal or institutional identification data will be reported or shared with another individual, group, or agency outside WICHE. Information from the demographic section at the end of the survey will be used only for purposes of organizing and aggregating data.
5. By completing the last question of the survey you will be informed when and where the final report is published on the WICHE web site.
6. If you begin the survey and need to finish it at a later time, simply close your web browser. When you are ready to finish the survey, click on the survey link and select "Resume" to return to where you left off in the survey.
7. Please complete and submit the survey online by **Tuesday, April 19, 2005**.
8. Questions may be addressed to:

Dr. Colleen O. Sathre
Vice President Emeritus, University of Hawaii
Consultant
al-wiche@hawaii.edu

or

Dr. Cheryl Blanco
Director, Policy Analysis and Research, WICHE
cblanco@wiche.edu

Thank you for your assistance with this important project.

Terms

For purposes of this survey, the following definitions apply.

Advanced Placement (AP): The College Board's AP Program® is a cooperative educational endeavor between secondary schools and colleges and universities that allows high school students to take college-level courses and national examinations developed by the College Board in a high school setting. If a student achieves a minimum score on these examinations, he or she may be awarded college credit, depending on the requirements of the postsecondary institution.

Dual/concurrent enrollment: Dual/concurrent enrollment programs allow high school students to enroll in and earn credit for college-level coursework while they are still in high school.

Tech-Prep: A federally funded program that includes a combination of at least two years of secondary education and two years of postsecondary education in a nonduplicative, sequential course of study leading to an associate's or baccalaureate degree, or a postsecondary certificate, in a specific career field. Tech-Prep also includes in-service training for secondary teachers, postsecondary faculty, counselors, and administrators.

International Baccalaureate (IB): A comprehensive two-year international pre-university course of study available in English, French, and Spanish that leads to examinations and an IB diploma. It generally allows students to fulfill the requirements of their national or state education systems; internationally mobile students are able to transfer from one Diploma Programme (DP) school to another.

A. General Institutional Policies and Practices

The first few questions are general queries on your institution's policies and practices related to accelerated learning options.

1) Does your institution have **written policies** concerning the acceptance of the following accelerated learning options?

	Yes	No
Advanced Placement		
Dual/concurrent enrollment		
Tech-Prep		
International Baccalaureate		

2) Is it the **practice** of your institution to consider any of the following accelerated learning options for purposes of admission and/or credit requirements?

	Yes	No
Advanced Placement		
Dual/concurrent enrollment		
Tech-Prep		
International Baccalaureate		

If you answered "Yes" to any of the above questions, click on the Continue button to be directed to the next set of questions.

If you answered "No" to all of the above, click on the Continue button to be directed to the Demographics section and to exit the survey.

3) Does your institution have minimum requirements for a high school student to participate in **dual/concurrent enrollment** programs? (Select all that apply.)

- Class standing as a junior or senior
- Recommendation from a high school counselor, teacher, or principal
- A specific high school grade point average
- No minimum requirements
- Other

If you selected other, please specify:

B. Admissions Policies and Practices

In this section, we are trying to better understand who makes policies involving accelerated learning credit, who implements those policies, and how accelerated learning is used in the admissions process.

4) Who makes the decision on how accelerated learning credit is treated in the admissions process at your institution?

- Chief academic officer
- Admissions officer
- College/school dean
- Department chair
- Faculty member(s)
- Other

If you selected other, please specify:

9) When is a student with accelerated learning credit informed that the credit is **accepted** by the institution?

- Before an offer of admission is made
- At the time an offer of admission is made
- After admission is offered, but before the student has enrolled
- After the student has enrolled
- Other

If you selected other, please specify:

10) When is a student with accelerated learning credit informed of how the credit has been **applied** by the institution?

- Before an offer of admission is made
- At the time an offer of admission is made
- After admission is offered, but before the student has enrolled
- After the student has enrolled
- Other

If you selected other, please specify:

11) Does the authority for determining how accelerated learning credit will be applied vary?

- Yes, it varies by program or department degree requirements within colleges and schools
- Yes, it varies by colleges and schools
- No, it remains consistent throughout the institution
- Other

If you selected other, please specify:

12) For the purpose of this question the following definitions apply.

Elective credit: Credits that count toward the total credits required for the completion of a credential (e.g., degree, certificate, diploma), but are not designated as specific general education, college/school, major, or other course requirements. For purposes of this survey, prerequisites for **elective** courses should be considered elective credit.

Required credit: Credits associated with courses that are specifically required to fulfill general education, college/school, major, or other course requirements. For purposes of this survey, prerequisites for **required** courses should be considered required credit.

Does your institution grant college elective or required credit for any of the following? (Select all that apply.)

	Elective credit	Required credit
Advanced Placement		
Dual/concurrent enrollment		
Tech-Prep		
International Baccalaureate		

13) Does your institution accept an International Baccalaureate diploma as equivalent to any college-level work?

- First year of college only
- First and second year of college
- No, the institution does not accept an International Baccalaureate diploma as equivalent to college-level work

14) How does accelerated learning credit appear on the student's college transcript?

- Same as other credit--with no special designation
- With a designation that distinguishes it from other credit

D. Collaboration with High Schools

The following two questions relate to your institution's interaction with high schools on accelerated learning options.

15) Does your institution have an **outreach** program to notify students, particularly those from **low-income, disadvantaged** backgrounds, about opportunities for accelerated learning options?

- Yes No

16) Where do students take accelerated learning courses? (Select all that apply.)

	At a high school	On a college campus	By means of a distance learning mode
Advanced Placement			
Dual/concurrent enrollment			
Tech-Prep			
International Baccalaureate			

E. Institutional Financial Assistance for Accelerated Learning Options

The last question asks about your institutional investment in accelerated learning through student financial assistance.

17) Does your institution provide any of the following types of student financial assistance specifically targeted for high school students from **low-income, disadvantaged** backgrounds who enroll in accelerated learning options? (Select all that apply.)

- Full tuition waivers or discounts
- Partial tuition waivers or discounts
- Special institutional grants from earmarked funds in the operating budget
- Special grants from external sources (e.g., GEAR-UP)
- No student financial assistance is given
- Other

If you selected other, please specify:

F. Demographic Information

This section should be completed by the **primary respondent** to the survey. No personal or institutional identification data will be reported or shared with another individual, group, or agency outside WICHE. Information from the demographic section will be used only for purposes of organizing and aggregating data.

18) Respondent's name

First name:

Last name:

19) Respondent's title:

20) Name of institution:

21) State:

If you selected other, please specify:

22) Respondent's email address:

23) Respondent's business phone number (with area code):

24) Respondent's chief area of responsibility:

- President's office
- Academic affairs
- Registrar
- Admissions
- Other

If you selected other, please specify:

25) Institution web address:

26) Would you like an email notification when the final report is published on the WICHE web site?

- Yes No

Thank you for taking the time to complete our survey. Your responses will greatly enhance our study on accelerated learning options and our effort to increase effective policy and practice related to these programs.

5) Who determines the accelerated learning admissions policy at your institution?

- Chief academic officer
- Admissions officer
- College/school dean
- Department chair
- Faculty member(s)
- Other

If you selected other, please specify:

6) Some institutions add weight to a student's high school grade point average for achievement associated with various accelerated learning options. Over and above such practices, does evidence of participation in any of the following accelerated learning options enhance a student's chance for admission?

	Yes	No
Advanced Placement		
Dual/concurrent enrollment		
Tech-Prep		
International Baccalaureate		
Other		

If you selected other, please specify:

7) Other factors being equal, does your institution give preference for admissions purposes to a student:

	Yes	No
Who has taken Advanced Placement courses without regard to the grade achieved?		
Whose high school GPA was enhanced by participating in Advanced Placement courses?		
Who has taken Advanced Placement courses and performed satisfactorily using standards defined by your institution?		
Who has taken Advanced Placement tests and performed satisfactorily using the standards defined by the College Board (received a grade of 3, 4, or 5)?		

C. Credit Assignment Practices

The focus of this set of questions is on the application of accelerated learning credit and notification of the student on how that credit is applied.

8) Who is responsible for deciding how accelerated learning credit will apply?

- Chief academic officer
- Admissions officer
- College/school dean
- Department chair
- Faculty member(s)
- Other

If you selected other, please specify:

Appendix D

Methodology and Findings from the Transcript Analysis

Brian T. Prescott

This appendix will describe the methodology used in this research and lay out its limitations. Then, it will provide more detailed results and analysis than were presented in Chapter 4.

Methodology

An essential component of in-depth research into this topic is data that track individual students throughout both their K-12 and postsecondary education experiences. Without data on the unit-record level, it is not possible to trace course-taking behaviors that enable meaningful observations about the relationship between specific courses and progress through the educational pipeline. Thus, the first step in this research was to identify state-level datasets with sufficient detail to allow tracking from K-12 on to postsecondary education. Originally, the intent of this project was to analyze data from three states with capable data systems: Florida, Ohio, and Texas. However, it was not possible to obtain data from either Ohio or Texas.

Over the last two decades, the state of Florida has developed a database, which is known as the K-20 Education Data Warehouse (K-20 EDW). One of the most comprehensive statewide unit-record databases in the nation, the K-20 EDW is a single repository for integrated education-related data from multiple state sources. It contains information that makes it possible to identify the courses individual students took in the public schools, the community colleges, and the state university system and when they took them, as well as what awards and degrees they obtained.

Several data files were provided by the K-20 EDW. These files were merged into a single dataset covering all students who were enrolled as 12th graders in the Florida public schools between the 1996-97 and 2002-03 academic years and who earned a high school diploma. For each student, the merged dataset included information about:

- Demographic characteristics.
- The number and type of accelerated credits earned.
- The year of high school graduation.
- The number and type of postsecondary credits institutions awarded for the accelerated credits students earned.

- Enrollment at a public postsecondary institution in Florida, by academic year and term.
- The number of remedial courses taken.
- Any postsecondary degree earned between the 1997-98 and 2004-05 academic years.

For those who earned an associate's or a bachelor's degree, each degree and the year in which it was conferred were recorded. The merged file did not include information about out-of-state students at Florida's public postsecondary institutions or students who did not receive a high school diploma.

Once the final merged dataset was complete, frequencies and cross-tabulations were performed in two stages. In the first stage, cross-tabulations looked at all the students who participated in any of the three accelerated options examined in the transcript analysis, as well as students who earned no accelerated credit. The second stage repeated this process and disaggregated the groups based on income and race/ethnicity. Since there was no direct measure of a student's family income available, receipt of free or reduced-price lunch or a Pell grant served as proxies for low-income status.¹ Unless otherwise specified, throughout this appendix and Chapter 4, "low-income status" refers to students who received subsidized lunch or a Pell grant.

For each type of accelerated learning, filters were applied to prevent mingling students who earned accelerated learning of another type with students who earned no accelerated credit. This was done to ensure that comparisons were made only between students who earned a specific type of accelerated credit and those who earned no accelerated credit at all. Students who earned more than one type of accelerated credit were included in all relevant analyses. For example, a student who earned accelerated credit through Advanced Placement (AP) and dual/concurrent enrollment courses was counted in the numerator in the analysis of each accelerated option.

Five indicators of postsecondary access and success were examined in this research: college-going, remediation, persistence, degree completion, and time to degree. College-going students were those who enrolled at a Florida public postsecondary institution in the fall semester following their high school graduation. For those students required to take remedial courses, the number of courses was tracked for each student. Students who persisted were those

who were continuously enrolled in the fall and spring terms over the course of two consecutive academic years.² Degree completion was separately recorded for associate's and bachelor's degrees. Finally, although the usual definition of time to degree starts the clock when a student first enrolls in a postsecondary institution, this analysis measured time to degree simply as the number of years between high school completion and postsecondary degree achievement, for two reasons. First, the K-20 EDW data that were provided do not specify how many credits a student was able to transfer in from postsecondary institutions outside the Florida public systems. Thus, starting the clock at the point at which a student first appears as being enrolled at a Florida public institution may understate the total number of academic terms he or she requires to complete a degree. Second, given the focus of the project on accelerated learning options, which are interventions that occur along the traditional education pipeline, it is appropriate to explore how long it takes students to complete postsecondary degrees relative to their high school graduation cohorts. Because the more recent a student's high school graduation year was, the less time he or she had to complete a postsecondary degree and be included in the time-to-degree analysis, additional steps were taken in an attempt to limit the skewness this caused. First, the dataset was restricted to leave out high school graduates from the most recent cohorts. Second, it was assumed that students enrolled at Florida public postsecondary institutions during the fall 2004 semester (which was the last academic term for which enrollment data were available) were continuing to seek a postsecondary degree; these students were removed from the analysis.

While the data provided by the K-20 EDW are indeed a rich resource, there are some significant limitations that bear on the analysis. The most important limitation is that the research design did not include controls for selection bias. Many of the same student attributes that are related to participation in rigorous academic coursework, like accelerated learning, are also related to enrollment and success in postsecondary education. Examples of such attributes might include native intelligence and parental or community support, but there are many others. Therefore, the results are descriptive; causal linkages between accelerated learning and observations about college-going, persistence, and success would be inappropriate. More data that provide information about these attributes, as well as a research design employing more sophisticated, inferential statistics, would be needed to disentangle the effects of selection bias from any hypothesized effects of the accelerated learning alternatives themselves.

In addition, the dataset contained no information about the postsecondary education experiences of Florida high school graduates who enrolled in private or out-of-state colleges and universities. As a result, it was not possible to distinguish between students who enrolled in those institutions from students who did not enroll at all.³ Since lower-income and traditionally underrepresented students are more likely to attend public in-state institutions, the analyses probably account for the actual postsecondary education behaviors of low-income and traditionally underrepresented students more completely than they do for more advantaged students.

Moreover, "swirling" patterns of student enrollments present a difficult challenge in terms of defining the reference groups for the analyses in this study. If students delay postsecondary enrollment or simultaneously enroll at multiple institutions, how they should be counted is not self-evident. That is, when examining bachelor's degree completion rates, how should a student who starts at a four-year institution but transfers to a community college be counted? What about a student who first attends an institution out of state and then transfers into a state university in Florida? What about a student who takes classes at both the four-year institution and the community college? These problems are especially prevalent in the interpretation of the results dealing with community colleges, due to the two-year program of full-time study and the myriad ways in which students use those institutions. But since accelerated learning is geared in large part toward boosting students directly from high school to and through college, the reference groups for the analyses that follow, other than immediate enrollment, were defined to include only the students who enrolled within each sector directly after high school. This definition fails to capture the students who attended institutions in more than one sector or who delayed enrollment following high school. Consequently, those analyses likely overstate the true relationship between accelerated learning and the respective outcome variable.

A final limitation relates to the generalizability of the findings beyond Florida. Other states have their own unique context shaped by their history and culture, demographic characteristics, public policies related to accelerated learning and postsecondary education, and other factors that influence how accelerated learning and postsecondary education experiences are related. Nevertheless, in addition to offering an unusually rich set of transcript data, Florida is an appropriate state for study because of its extensive state-level attention to what it calls "articulated acceleration mechanisms."⁴

Results and Discussion

Table D.1 provides descriptive characteristics of the students in the dataset, organized by high school graduating class. The data show that between 1996-97 and 2002-03, there were 734,467 high school graduates who had been enrolled as 12th graders in Florida’s public schools. The considerable growth in the number of high school graduates in Florida is readily apparent: the 2003 cohort was 30.8 percent larger than the 1997 cohort, representing an increase of 28,398 students. Of the total number, 59 percent were White, non-Hispanic; the two largest minority groups were Black, non-Hispanics and Hispanics, at 20 percent and 16.4 percent, respectively. Nearly 37 percent, or 268,837 graduates, were from low-income backgrounds, as indicated by their receipt of free or reduced-price lunches or Pell grants.

Evidence of Florida’s increasing racial/ethnic diversity is apparent from the data as well, with 56.3 percent growth rate in the number of Hispanic high school graduates outpacing that of other major racial/ethnic groups. Similarly, the number of high school graduates who were low income increased substantially; 9,787 (26.3 percent) more graduates had participated in the subsidized lunch program in the 2003 cohort than in the 2000 cohort,⁵ and the share of the graduating class who received subsidized lunch increased modestly by nearly 3 percent. The increase was slightly less dramatic among students identified as low income by their receipt of subsidized lunch or a Pell grant, at 6,707 (16.7 percent) more graduates. The slower growth in

the size of this group may be attributable in part to college-going patterns of low-income students, since students who do not go on to college are not eligible for a Pell grant. Clearly, the demand for postsecondary education in Florida grew considerably during the time frame under examination, and that demand also became more racially and ethnically diverse and less wealthy.

Enrollment at Florida’s public postsecondary institutions by graduates of Florida public high schools grew substantially during the period under study. The number of high school graduates who took community college classes in the fall immediately after completing high school was 25,530 for the class of 1997 and 35,528 for the class of 2003, an increase of 39.2 percent. Enrollments at the state university by recent Florida public high school graduates increased by more than two-thirds, from 15,624 in the class of 1997 to 26,154 of the class of 2003.

There were 172,276 graduates who received a Bright Futures scholarship, which is a lottery-funded, merit-based grant program that provides up to the full amount of tuition and fees, plus money for related expenses, to Florida residents who attend an in-state institution. Nearly 17 percent of low-income students, or 45,175 students, received Bright Futures awards, compared to 32 percent of middle- and high-income graduates. Furthermore, 60.4 percent of AP participants, 67.4 percent of IB participants, and 63.7 percent of dual/concurrent enrollment participants received Bright Futures scholarships, compared to 16.8 percent of graduates without accelerated credit.

Table D.1. Selected characteristics of Florida cohorts, 1997 to 2003

	1996-1997		1997-1998		1998-1999		1999-2000		2000-2001		2001-2002		2002-2003		Total		% Change 1997-2003
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Total students	92,312	N/A	96,328	N/A	99,761	N/A	103,188	N/A	106,785	N/A	115,383	N/A	120,710	N/A	734,467	N/A	30.8
Females	48,696	52.8	51,049	53.0	52,878	53.0	55,199	53.5	56,616	53.0	61,349	53.2	63,681	52.8	389,468	53.0	30.8
Race/ethnicity																	
American Indian/ Alaska native	325	0.4	317	0.3	290	0.3	313	0.3	337	0.3	390	0.3	412	0.3	2,384	0.3	26.8
Asian or Pacific Islander	2,785	3.0	2,835	2.9	2,979	3.0	3,163	3.1	3,226	3.0	3,448	3.0	3,430	2.8	21,866	3.0	23.2
Black, non- Hispanic	18,923	20.5	19,771	20.5	20,132	20.2	20,727	20.1	21,533	20.2	22,723	19.7	22,988	19.0	146,797	20.0	21.5
Hispanic	14,101	15.3	14,621	15.2	15,484	15.5	16,233	15.7	18,046	16.9	20,187	17.5	22,038	18.3	120,710	16.4	56.3
White, non- Hispanic	55,129	59.7	57,831	60.0	59,752	59.9	61,518	59.6	62,334	58.4	67,022	58.1	69,937	57.9	433,523	59.0	26.9
Other	1,049	1.1	953	1.0	1,124	1.1	1,234	1.2	1,309	1.2	1,613	1.4	1,905	1.6	9,187	1.3	81.6
Subsidized lunch	21,519	23.3	26,758	27.8	31,491	31.6	37,160	36.0	40,460	37.9	44,489	38.6	46,947	38.9	248,824	33.9	118.2
Pell or subsidized lunch	26,910	29.2	31,749	33.0	35,477	35.6	40,241	39.0	43,008	40.3	44,504	38.6	46,948	38.9	268,837	36.6	74.5

Note: Students who were enrolled in the free or reduced-price lunch program at any time between 8th grade and their high school graduation were coded into the “Subsidized Lunch” category. Because Florida’s K-20 EDW does not contain data prior to the 1995-96 academic year, it was not possible to track the subsidized lunch program enrollment of graduates in the class of 1999 and earlier back to their 8th grade year. These were counted among recipients of subsidized lunch if they were enrolled in the program at any time between the 1995-96 academic year and their high school graduation. This explains the substantial increase in the share of students enrolled in the free or reduced-price lunch program between the classes of 1997 and 2000, since the take-up rate for the program typically declines during high school, though most students remain eligible.

In addition, 74,769 Florida public high school graduates earned associate's degrees and 63,782 earned bachelor's degrees from Florida public institutions between the fall of 1997 and the fall of 2004. Of these, low-income students earned 19,672, or 26.3 percent, of all associate's degrees, and 18,747, or 29.4 percent, of all bachelor's degrees. Given that research has shown that low-income students are more heavily concentrated at two-year colleges than at four-year colleges,⁶ the finding that they completed a higher percentage of bachelor's than associate's degrees is notable. Of the low-income students who received an associate's degree at a Florida community college, 5,817, or about 28 percent, went on to complete a bachelor's degree at a Florida public university.

What are the characteristics of students who participate in accelerated options?

The first research question seeks to provide some answers concerning the degree to which students from different backgrounds took advantage of Advanced Placement (AP), International Baccalaureate (IB), and dual/concurrent enrollment. Accelerated learning options have become increasingly popular among Floridians. Figure D.1 shows how enrollment in AP, IB, and dual/concurrent enrollment courses increased steadily throughout the period under study. AP grew especially quickly, as the number of students who graduated from high school with AP credits was more than 10,000 higher in 2003 than in 1997. These numbers reflect an increase in the share of graduates with AP credit of close to 7 percent. Increases, though not as large, are also evident for IB and dual/concurrent enrollment.

The proportion of low-income students and underrepresented minorities who earned accelerated

Figure D.1. Florida high school graduates who participated in AP, dual/concurrent enrollment, and/or IB, 1997 to 2003

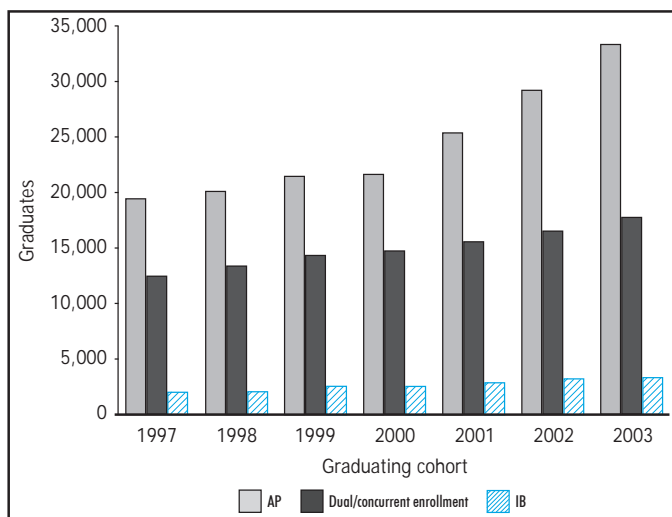


Table D.2. Participation in accelerated learning options, all Florida cohorts

	AP		Dual/concurrent enrollment		IB	
	Number	Percent	Number	Percent	Number	Percent
Total	170,449	23.2	104,997	14.3	18,527	2.5
Low-income	45,453	16.9	25,157	9.4	3,732	1.4
Asian or Pacific Islander	9,824	42.2	4,532	20.7	2,021	9.2
Black, non-Hispanic	17,528	11.9	10,147	6.9	2,270	1.5
Hispanic	31,136	25.8	8,378	6.9	1,898	1.6
White, non-Hispanic	109,216	25.2	80,315	18.5	12,027	2.8

learning credit was much lower than that of middle- and high-income students and White, non-Hispanics, a pattern which was evident across all three accelerated options, as Table D.2 demonstrates. Although 45,453 low-income students earned AP credit, that number represented about 17 percent of all low-income high school graduates over the seven-year period, compared to a participation rate of 23.2 percent for all students. The sole exception was Hispanic students, whose rate of achieving AP credits exceeded that of White, non-Hispanic students. Both dual/concurrent enrollment and especially IB options were less prevalent than AP, and participation rates reflect that. Only 2.5 percent of all students took part in IB, while 14.3 percent took part in dual/concurrent enrollment. Participation rates of low-income students and Black, non-Hispanic and Hispanic students in both IB and dual/concurrent enrollment were lower than their rates for AP. For example, only 1.4 percent of low-income students participated in IB, and less than one in 10 low-income students participated in dual/concurrent enrollment. In particular, low numbers of students from historically underrepresented groups among the seven graduating cohorts participated in IB, ranging from 1,898 for Hispanics to 3,732 for low-income graduates.

Is participation in accelerated options related to educational outcomes such as college-going, persistence, and degree completion?

Table D.3 presents a comparison of the college-going rates of Florida high school graduates, based on whether they participated in accelerated learning options.⁷ High school graduates who took part in AP, IB, or dual/concurrent enrollment were more likely to enroll immediately at a public four-year campus than students who did not earn accelerated credit in high school. Students with dual/concurrent enrollment experiences were only slightly more likely to enroll at a community college after completing high school than their peers with no accelerated credit. Only 6 percent more students with dual/concurrent enrollment credit enrolled at a state university campus as enrolled at a community college. The widest disparity in enrollment

Table D.3. Number and percent of students who enrolled at postsecondary institutions in Florida immediately after graduating from high school, by type of accelerated learning option, all Florida cohorts

	Community College		State University	
	Number	Percent	Number	Percent
No accelerated credit	150,256	30.9	35,561	7.3
AP	30,831	19.9	67,243	43.3
Dual/concurrent enrollment	30,465	31.7	36,146	37.6
IB	1,126	6.7	8,822	52.6

Note: Pell recipients were excluded from the dataset.

rates between the two sectors was for IB participants. Almost eight times as many IB participants and more than twice as many AP participants enrolled at a state university as at a community college. This may be partially due to the academic focus of these programs. It may be that participation in these programs helped to shift students toward the four-year sector.

Students' ability to remain enrolled in college is another determinant of success. Table D.4 provides evidence that students with almost any type of accelerated credit maintained continuous enrollment for two consecutive years within both the community colleges and the campuses of the state university system at higher proportions than did students with no accelerated credit. In the four-year sector, students with AP, IB, or dual/concurrent enrollment credit maintained enrollment at rates at least 10 percentage points higher than those of students without accelerated credit. At the community colleges, students with AP and dual credit remained enrolled at a higher rate than students with no accelerated credit, while the share of students with IB credit was somewhat lower.⁸

Table D.4. Two years of continuous enrollment, by type of accelerated learning option, selected Florida cohorts

	Community College		State University	
	Number	Percent	Number	Percent
No accelerated credit	72,856	56.2	20,141	76.7
AP	15,952	62.2	32,951	87.7
Dual/concurrent enrollment	15,502	59.1	19,110	86.8
IB	539	54.8	4,339	89.1

Note: Analysis of continuous enrollment at community colleges includes only students from the cohorts 1997 to 2002 who immediately enrolled at a community college. Analysis of continuous enrollment at state universities includes only students from the cohorts 1997 to 2000 who immediately enrolled at a state university.

Table D.5 shows that participants in AP, IB, or dual/concurrent enrollment options were more likely to obtain an associate's or a bachelor's degree than nonparticipants. Among those high school graduates with no accelerated credit who immediately enrolled at a community college, only 23.4 percent eventually

Table D.5. Postsecondary degree completion by type of accelerated learning option, selected Florida cohorts

	Associate's degree		Bachelor's degree	
	Number	Percent	Number	Percent
No accelerated credit	30,282	23.4	11,763	44.8
AP	11,354	44.2	24,776	65.9
Dual/concurrent enrollment	13,628	51.9	14,709	66.8
IB	435	44.2	3,381	69.4

Note: Associate's degree analysis includes only students from the cohorts 1997 to 2002 who immediately enrolled at a community college. Bachelor's degree analysis includes only students from the cohorts 1997 to 2000 who immediately enrolled at a university.

earned an associate's degree by 2004-2005, compared to 44 percent of students with AP and IB credit and nearly 52 percent of students with dual/concurrent enrollment. The performance of dual/concurrent enrollment students in earning associate's degrees may not be coincidental, since they would be the most familiar with community colleges and they had probably already accrued postsecondary credits. While close to 45 percent of students who did not earn accelerated credit in high school and who immediately enrolled at a state university eventually completed a bachelor's degree, 66 percent of AP participants, almost 70 percent of IB participants, and close to two-thirds of dual/concurrent enrollment participants obtained a bachelor's degree by the fall of 2004.

How does participation in accelerated options relate to a student's progress toward a postsecondary degree?

A significant obstacle to degree completion for undergraduates is remedial education. Its impact on student progress and its cost have made remediation an important concern for educational researchers and policymakers. Taking an academically rigorous curriculum while in high school should reduce the need for remedial coursework at the threshold of postsecondary education. Data were available to examine the extent to which students who participated in accelerated learning during high school were subsequently required to take remedial courses. Table D.6 shows that students with accelerated credit

Table D.6. Students requiring remedial courses in postsecondary education, selected Florida cohorts

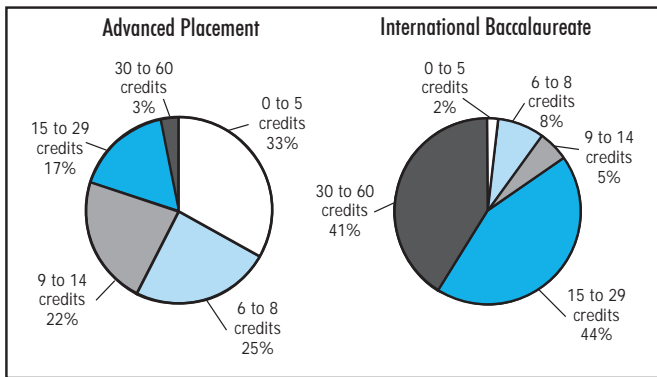
	No courses		1-2 courses		3-5 courses		6+ courses	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
No accelerated credit	46,664	36.0	37,323	28.8	30,063	23.2	15,632	12.1
AP	18,669	72.7	4,406	17.2	1,915	7.5	676	2.6
Dual/concurrent enrollment	20,033	76.3	4,080	15.5	1,661	6.3	468	1.8
IB	812	82.5	121	12.3	39	4.0	12	1.2

Note: Dataset restricted to students from the 1997 to 2002 cohorts who enrolled at community colleges immediately after high school.

were much less likely to require remediation. Almost 73 percent of students with AP credit, 83 percent of students with IB credit, and 76 percent of students with dual/concurrent enrollment credit needed no remedial courses, compared to 36 percent of students without accelerated credit.

Figure D.2 provides information about the degree to which Florida postsecondary institutions awarded college credit to students who completed AP or IB credit while in high school.⁹ It indicates that most of the 37,491 AP students who were awarded credit by Florida public institutions received up to nine postsecondary credit hours for their participation in AP; 7,524 students earned more than a semester (15 credit hours); and 1,157 students were awarded the equivalent of sophomore status on the basis of their earned AP credit alone. The numbers for credit awarded for IB participation are skewed in the opposite direction, which fits with the program’s approach of immersing students for two years in college-level coursework. Nearly 85 percent of the 5,592 students who received credit for IB participation were awarded 15 or more college credits. Of these, 2,294 students achieved sophomore status prior to entering college.

Figure D.2. Postsecondary credits awarded to AP and IB participants, all Florida cohorts



The evidence from Florida concerning whether accelerated learning options were associated with decreased time to degree is measured in the number of years between high school graduation and degree completion. Table D.7 presents the results of an analysis of the relationship between accelerated options types and the number of years between high school graduation and associate’s degree completion for members of the high school graduating classes of 1997-2002, after accounting for the students who were enrolled at the end of the time period under examination in fall 2004. First, students who earned accelerated credit in high school needed less time to earn an associate’s degree than their peers without accelerated credit. More than one in four students

Table D.7. Time between high school graduation and completion of an associate’s degree, selected Florida cohorts¹⁰

	1 year or less		1+ to 2 years		2+ to 3 years		More than 3 years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total								
No accelerated credit	11	0.0	816	1.4	12,521	21.5	16,934	29.0
AP	108	0.7	1,766	11.3	5,921	37.8	3,559	22.7
Dual/concurrent enrollment	301	1.8	3,249	19.0	6,710	39.2	3,368	19.7
IB	3	0.5	83	14.4	220	38.1	129	22.3

Note: Dataset restricted to students from the 1997 to 2002 cohorts who enrolled at community colleges immediately after high school. Percent values do not sum to 100; the remainder represents the share who were enrolled in fall 2004.

with dual/concurrent enrollment credit completed an associate’s degree within two years, as did almost one in five students with IB credit and 16.6 percent of students with AP credit, compared to 2.7 percent of students without any accelerated learning. Finally, more than three years elapsed between high school graduation and completion of an associate’s degree for more than half of students with no accelerated credit, while the shares of students with accelerated credit who took that long ranged between about one-quarter for dual/concurrent enrollment and one-third for AP.

Among bachelor’s degree recipients, accelerated learning options also were related to more rapid times to degree, as indicated in Table D.8. Of the students who earned a bachelor’s degree by the fall of 2004 from the high school graduating classes of 1997 to 2000, 6.7 percent of IB students, 7 percent of dual/concurrent enrollment students, and 3.7 percent of AP students earned their degrees within three years. Additionally, over half of the students with IB and dual credit completed a bachelor’s degree within four years. The proportion of students with AP credit who completed on time or earlier was somewhat lower, yet still considerably higher than the share of students without accelerated learning who finished on time.

Table D.8. Time between high school graduation and completion of a bachelor’s degree, selected Florida cohorts¹¹

	3 years or less		3+ to 4 years		4+ to 6 years		More than 6 years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total								
No accelerated credit	70	0.4	3,834	21.6	7,348	41.3	511	2.9
AP	907	3.0	12,280	40.3	11,102	36.4	487	1.6
Dual/concurrent enrollment	1,084	4.6	7,992	34.0	6,095	25.9	275	1.2
IB	226	5.6	1,789	44.0	1,304	32.1	62	1.5

Note: Dataset restricted to students from the 1997 to 2002 cohorts who enrolled at state university immediately after high school. Percent values do not sum to 100; the remainder represents the share who were enrolled in fall 2004.

These findings suggest that participation in accelerated learning coursework is related to more rapid completion of postsecondary degrees than is nonparticipation. However, the evidence does not lead to a conclusion as to whether students who were involved in accelerated options finished in less time because of their participation in accelerated options or due to unobservable characteristics. Moreover, the share of students who earned associate’s degrees on time was just over a quarter at most, even with accelerated credit. These low rates are likely due in part to the greater proportion of part-time students at community colleges; any students who may have attended classes at community colleges only in order to complete remediation requirements; and students who enrolled at a community college with no intention of pursuing an associate’s degree, but rather to complete requirements before moving on to a more senior institution.

Are there differences in the patterns of college-going, persistence, and degree completion related to accelerated learning based on income and race/ethnicity?

Like many other activities that tend to broaden access to educational opportunity, low-income and traditionally underrepresented students have had more limited access to accelerated learning options than higher-income and White, non-Hispanic students. In recent years, however, some have advocated for the use of accelerated learning options as a strategy with potential to help address the gaps in college participation across income and racial/ethnic groups.¹² The data provided by Florida make possible an initial examination of the degree to which this potential may be fulfilled.

Tables D.9a and D.9b show the number and share of high school graduates who enrolled immediately in Florida’s public postsecondary institutions after their

Table D.9a. Immediate enrollment by accelerated learning option and income group, all Florida cohorts

	Community College		State University	
	Number	Percent	Number	Percent
Low-income				
No accelerated credit	47,087	24.7	5,523	2.9
AP	8,539	28.3	7,475	24.8
Dual/concurrent enrollment	6,027	37.3	3,328	20.6
IB	258	13.0	805	40.5
Not low-income				
No accelerated credit	103,169	34.9	30,038	10.2
AP	22,292	17.8	59,768	47.8
Dual/concurrent enrollment	24,438	30.6	32,818	41.1
IB	868	5.9	8,017	54.2

Table D.9b. Immediate enrollment by accelerated learning option and race/ethnicity, all Florida cohorts

	Community College		State University	
	Number	Percent	Number	Percent
Asian or Pacific Islander				
No accelerated credit	3,751	39.8	1,154	12.2
AP	1,229	14.6	4,182	49.6
Dual/concurrent enrollment	893	23.4	1,791	46.8
IB	77	4.2	969	53.1
Black, non-Hispanic				
No accelerated credit	27,388	23.8	6,751	5.9
AP	2,549	18.0	5,777	40.8
Dual/concurrent enrollment	2,170	27.0	2,928	36.4
IB	147	8.4	899	51.3
Hispanic				
No accelerated credit	27,123	33.0	4,179	5.1
AP	7,312	26.6	8,637	31.4
Dual/concurrent enrollment	2,305	31.8	2,617	36.1
IB	125	7.6	817	49.5
White, non-Hispanic				
No accelerated credit	88,987	32.7	22,899	8.4
AP	19,069	18.6	47,630	46.4
Dual/concurrent enrollment	24,551	32.6	28,307	37.5
IB	748	6.6	5,982	53.1

Notes: Some students enrolled in courses in the community college system and in the state university system; these individuals are counted in both columns. Percent is the share of students within each category that immediately enrolled. Pell grant recipients excluded from the dataset.

graduation, broken out by income and race/ethnicity. For both low-income students and their wealthier peers and for all racial/ethnic categories, students who earned accelerated credit through AP, IB, or dual/concurrent enrollment courses were more likely to enroll at a campus in the state university system than students without accelerated credit. The difference in shares of students going directly to a four-year college is dramatic: students with some accelerated credit enrolled in universities at least four times the rate of students with no accelerated credit. While about 3 percent of low-income students without accelerated credit went directly to a university, about one in four low-income students with AP credit and more than one in five with dual/concurrent enrollment credit did. Of the few low-income students who had IB credit, four of every 10 enrolled immediately in a public university in Florida.

For all accelerated learning programs, as well as among students without any accelerated credit, middle- and high-income students went on immediately to state universities at much higher rates than their low-income peers. The enrollment rate of wealthier students who took AP or dual/concurrent enrollment courses was roughly twice that of their low-income counterparts.

College enrollment by race/ethnicity shows a similar pattern. Regardless of the type of accelerated learning credit, Asian/Pacific Islander and White, non-Hispanic students went directly to the state university campuses at higher rates than did Black, non-Hispanic and Hispanic students. But participation in accelerated learning was related to dramatically higher college-going rates for all racial/ethnic groups. There was only a modest difference in the rates at which White, non-Hispanics, Black, non-Hispanics, and Hispanics who earned dual/concurrent enrollment credit immediately enrolled in the state university system, however. Black, non-Hispanic students with IB credit also enrolled at a university at a rate nearly equivalent to that of Asian/Pacific Islanders and White, non-Hispanics. The differences among racial/ethnic groups remained wide among students with AP credit, however. Less than a third of Hispanics and one in four Black, non-Hispanic students with AP credit enrolled immediately at a university.

The picture is less clear when looking at the rates of those who went directly to community college. The findings for immediate enrollment at one of Florida's community colleges are very different from those for the four-year institutions. Among students without accelerated credit, Black, non-Hispanics were least likely to go to a community college, at about 24 percent. Asian/Pacific Islanders with accelerated credit of any kind were the least likely to attend a community college. Among students with AP credit, nearly 27 percent of Hispanics enrolled at community colleges, which was almost 50 percent more likely than Black, non-Hispanics and White, non-Hispanics with AP credit.

Table D.10a. Enrollment in remedial courses by income group, selected Florida cohorts

	No courses		1-2 courses		3-5 courses		6 or more courses	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Low-income								
No accelerated credit	11,065	26.5	12,084	28.9	11,548	27.6	7,104	17.0
AP	4,743	59.6	1,810	22.7	999	12.5	409	5.1
Dual/concurrent enrollment	4,221	68.6	1,203	19.5	546	8.9	184	3.0
IB	207	77.8	41	15.4	14	5.3	4	1.5
Not low-income								
No accelerated credit	35,599	40.5	25,239	28.7	18,515	21.1	8,528	9.7
AP	13,926	78.7	2,596	14.7	916	5.2	267	1.5
Dual/concurrent enrollment	15,812	78.7	2,877	14.3	1,115	5.6	284	1.4
IB	605	84.3	80	11.1	25	3.5	8	1.1

Note: Dataset restricted to graduates from the 1997 to 2002 high school cohorts who enrolled at community colleges immediately after high school.

Table D.10b. Enrollment in remedial courses by race/ethnicity, selected Florida cohorts

	No courses		1-2 courses		3-5 courses		6 or more courses	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Asian or Pacific Islander								
No accelerated credit	1,169	34.1	1,012	29.5	742	21.7	504	14.7
AP	767	67.4	230	20.2	103	9.1	38	3.3
Dual/concurrent enrollment	569	67.3	177	20.9	75	8.9	25	3.0
IB	53	82.8	6	9.4	4	6.3	1	1.6
Black, non-Hispanic								
No accelerated credit	4,369	18.1	6,600	27.3	7,667	31.8	5,499	22.8
AP	1,285	56.1	591	25.8	298	13.0	115	5.0
Dual/concurrent enrollment	1,052	52.4	539	26.8	288	14.3	130	6.5
IB	109	69.0	37	23.4	9	5.7	3	1.9
Hispanic								
No accelerated credit	6,628	28.7	7,036	30.5	6,092	26.4	3,343	14.5
AP	3,236	53.5	1,552	25.7	886	14.6	376	6.2
Dual/concurrent enrollment	1,324	67.1	425	21.6	167	8.5	56	2.8
IB	73	66.4	23	20.9	11	10.0	3	2.7
White, non-Hispanic								
No accelerated credit	33,662	44.0	21,967	28.7	14,988	19.6	5,953	7.8
AP	13,031	83.0	1,942	12.4	592	3.8	134	0.9
Dual/concurrent enrollment	16,759	79.9	2,861	13.6	1,098	5.2	249	1.2
IB	558	88.9	51	8.1	14	2.2	5	0.8

Note: Dataset restricted to students from the 1997 to 2002 high school cohorts who enrolled at community colleges immediately after high school.

Research has shown that members of historically underrepresented groups are more likely to be under-prepared for college and thus require remediation.¹³ Table D.10a shows how economically disadvantaged students compared to their wealthier peers with respect to remediation and based on participation in accelerated learning options. It shows that low-income students still enrolled in remedial courses at higher rates than those of middle- and high-income students, regardless of whether they took part in accelerated learning. Just under three quarters of low-income students without accelerated learning who enrolled immediately at a community college enrolled in at least one remedial course, and more than twice as many took between one and five remedial courses as took no remedial courses.

Both low-income and wealthier students who enrolled in accelerated learning took fewer remedial courses. IB students enrolled in the lowest number of remedial courses among both low-income and wealthier students. Among low-income students with accelerated credit, a higher proportion of students with AP credit took remedial courses than did students with dual/concurrent or IB credit. Fewer than six in 10 students with AP credit avoided remedial coursework altogether.

White, non-Hispanic students took the fewest number of remedial courses, compared with other racial/ethnic groups who had earned the same kind of accelerated credit. Table D.10b shows that Black, non-Hispanics required more remedial courses than other minorities. Only 18 percent of Black, non-Hispanics with no accelerated credit avoided remedial courses altogether; 27 percent enrolled in one or two courses; 32 percent took three to five courses; and 23 percent had six or more courses. Participation in accelerated learning was related to substantial improvements in those numbers for Black, non-Hispanics, however, as well as for other racial/ethnic groups.

Tables D.11a and D.11b present information about the continuous enrollment of students by income group and race/ethnicity and accelerated learning option. First, they indicate that AP, IB, and dual/concurrent enrollment were all related to improved rates of continuous enrollment at the state university system for all types of students. A similar pattern was not apparent at the community colleges, but interpreting the results for community colleges is especially difficult since transfers to four-year institutions and students who earn an associate’s degree in less than two years are not counted. Whereas 53 percent of low-income students with no accelerated credit remained enrolled at the community colleges for two consecutive years, low-income students with IB credit maintained enrollment there at the lower rate of 48.5 percent. Additionally, Asian/Pacific Islanders with accelerated

Table D.11a. Continuous enrollment by accelerated learning option and income group, selected Florida cohorts

	Community College		State University	
	Number	Percent	Number	Percent
Low-income				
No accelerated credit	22,151	53.0	8,117	77.6
AP	4,784	60.1	10,070	86.9
Dual/concurrent enrollment	3,341	54.3	5,543	85.8
IB	129	48.5	1,250	87.7
Not low-income				
No accelerated credit	50,705	57.7	12,024	76.0
AP	11,168	63.1	22,881	88.0
Dual/concurrent enrollment	12,161	60.5	13,567	87.2
IB	410	57.1	3,089	89.6

credit of any type, Black, non-Hispanic students with AP or IB credit, and Hispanic students with IB or dual/concurrent enrollment credit all were continuously enrolled at the community colleges at lower rates than their peers within the same racial/ethnic group who had no accelerated credit.

The table also shows that while low-income students with no accelerated credit maintained continuous enrollment at community colleges at a lower rate than wealthier students with no accelerated credit, they remained enrolled for two consecutive years at the state university at a slightly higher rate. Although all the differences between low-income and wealthier students are small, it is worth noting that among those with no accelerated credit, 77.6 percent of low-income students maintained continuous enrollment versus 76 percent for middle- and high-income students. This unexpected result is not duplicated for students with AP, IB, or dual/concurrent enrollment credit. Similarly, Black, non-Hispanic and Hispanic students without accelerated credit remained enrolled at the state universities at higher rates than White, non-Hispanics without accelerated credit. Also, Hispanics with IB credit remained enrolled at a slightly higher rate than White, non-Hispanics with IB credit and Black, non-

Table D.11b. Continuous enrollment by accelerated learning option and race/ethnicity, selected Florida cohorts

	Community College		State University	
	Number	Percent	Number	Percent
Asian or Pacific Islander				
No accelerated credit	2,249	65.6	794	79.7
AP	688	60.5	2,350	91.8
Dual/concurrent enrollment	522	61.7	1,092	90.7
IB	39	60.9	452	90.6
Black, non-Hispanic				
No accelerated credit	11,986	49.7	5,171	79.2
AP	1,127	49.2	3,512	87.5
Dual/concurrent enrollment	1,029	51.2	2,103	87.5
IB	62	39.2	689	87.3
Hispanic				
No accelerated credit	13,972	60.5	2,435	75.2
AP	4,024	66.5	4,338	85.7
Dual/concurrent enrollment	1,138	57.7	1,386	84.2
IB	62	56.4	410	90.5
White, non-Hispanic				
No accelerated credit	43,126	56.3	11,432	75.8
AP	9,787	62.3	22,341	87.8
Dual/concurrent enrollment	12,516	59.7	14,297	86.8
IB	363	57.8	2,711	89.1

Note: Continuous enrollment means a student was enrolled during the fall and spring terms of two consecutive academic years at some point after he or she graduated from high school. Dataset was restricted to include only those students from the 1997 to 2002 cohorts who enrolled in community college and those students from the 1997 to 2000 cohorts who enrolled in a state university immediately after high school.

Hispanics with dual/concurrent enrollment credit showed a higher rate than White, non-Hispanics with dual/concurrent enrollment. Again, these differences were negligible, as about nine out of 10 students of all racial/ethnic backgrounds with any kind of accelerated learning credit maintained continuous enrollment in the state university system.

Table D.12a. Degree completion by accelerated learning option and income group, selected Florida cohorts

	Associate's degrees		Bachelor's degrees	
	Number	Percent	Number	Percent
Low-income				
No accelerated credit	7,719	18.5	4,258	40.7
AP	2,977	37.4	6,998	60.4
Dual/concurrent enrollment	2,755	44.8	3,960	61.3
IB	108	40.6	927	65.1
Not low-income				
No accelerated credit	22,563	25.7	7,505	47.5
AP	8,377	47.3	17,778	68.4
Dual/concurrent enrollment	10,873	54.1	10,749	69.1
IB	327	45.5	2,454	71.2

Table D.12b. Degree completion by accelerated learning option and race/ethnicity, selected Florida cohorts

	Associate's degrees		Bachelor's degrees	
	Number	Percent	Number	Percent
Asian or Pacific Islander				
No accelerated credit	1,062	31.0	460	46.2
AP	543	47.7	1,718	67.1
Dual/concurrent enrollment	458	54.1	818	67.9
IB	33	51.6	361	72.3
Black, non-Hispanic				
No accelerated credit	3,346	13.9	2,453	37.6
AP	652	28.5	2,298	57.2
Dual/concurrent enrollment	684	34.0	1,373	57.1
IB	53	33.5	487	61.7
Hispanic				
No accelerated credit	4,923	21.3	1,262	39.0
AP	2,240	37.0	2,923	57.7
Dual/concurrent enrollment	912	46.2	970	58.9
IB	33	30.0	299	66.0
White, non-Hispanic				
No accelerated credit	20,267	26.5	7,433	49.3
AP	7,683	48.9	17,553	69.0
Dual/concurrent enrollment	11,301	53.9	11,385	69.1
IB	308	49.0	2,179	71.6

Note: For associate's degrees, the dataset was restricted to all students from the 1997 to 2002 cohorts who enrolled at a community college immediately after completing high school. For bachelor's degrees, the dataset was restricted to all students from the 1997 to 2000 cohorts who enrolled at a state university campus immediately after completing high school.

Tables D.12a and D.12b provide a breakdown of associate's and bachelor's degree completion rates by income status and accelerated learning option. They show that low-income students with some accelerated credit were at least about twice as likely to earn an associate's degree as their peers with no accelerated credit. Of low-income students who immediately enrolled at a community college, 18.5 percent with no accelerated credit earned associate's degrees, compared to 37.4 percent with AP credit, over 40 percent with IB credit, and almost 45 percent with dual/concurrent enrollment credit. In each case, the share of low-income students earning an associate's degree was lower than the rates achieved by middle- and high-income students with similar accelerated credit, and in fact the size of the difference between the shares widened for accelerated credit except for IB students. That is, 25.7 percent of wealthier students who went directly to community colleges with no accelerated credit earned associate's degrees, a rate 7.2 percentage points higher than that of low-income students. Yet 47.3 percent of wealthier students with AP credit earned an associate's degree, a difference of almost 10 percentage points relative to the rate at which low-income students with AP credit earned associate's degrees. Therefore, the gap between low-income and wealthier students in associate's degree completion rates was slightly wider for AP participants than for students without accelerated credit.

Among students who went directly to the state universities, about four in 10 low-income students without accelerated credit earned a bachelor's degree, compared to nearly one in two of middle- and high-income students. Students from both income groups earned bachelor's degrees at higher rates if they had been involved in accelerated learning. More than six in 10 low-income students with AP completed a bachelor's degree; the rates for those with IB and dual/concurrent enrollment credit were slightly higher.

Looking at racial/ethnic groups, less than 14 percent of Black, non-Hispanic students without accelerated learning earned an associate's degree, a much lower rate than that of other groups. Except for students with IB credit, Black, non-Hispanics also earned associate's degrees at substantially lower rates than other racial/ethnic groups. Asian/Pacific Islander and White, non-Hispanic students completed both associate's degrees and bachelor's degrees at higher rates than Black, non-Hispanic and Hispanic students, regardless of accelerated credit. Only Hispanics with IB credit were within five percentage points of White, non-Hispanics and Asian/Pacific Islanders on bachelor's degree completion. Finally, students with dual/concurrent enrollment credit were consistently more likely to earn an associate's degree than were students with AP or IB credit, regardless of whether they were low-income or not and regardless of what racial/ethnic group they

belonged to (although the difference for Black, non-Hispanics was small).

Tables D.13a and D.13b present information about how long it took students to complete an associate's degree

Table D.13a. Time between high school graduation and associate's degree completion by income group, selected Florida cohorts¹⁴

	1 year or less		1+ to 2 years		2+ to 3 years		More than 3 years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Low-income								
No accelerated credit	2	0.0	209	1.2	3,067	17.3	4,441	25.1
AP	29	0.6	392	8.6	1,517	33.1	1,039	22.7
Dual/concurrent enrollment	83	2.3	597	16.2	1,345	36.6	730	19.9
IB	0	0.0	21	14.2	57	38.5	30	20.3
Not low-income								
No accelerated credit	9	0.0	607	1.5	9,454	23.3	12,493	30.7
AP	79	0.7	1,374	12.4	4,404	39.7	2,520	22.7
Dual/concurrent enrollment	218	1.6	2,652	19.7	5,365	39.9	2,638	19.6
IB	3	0.7	62	14.4	163	37.9	99	23.0

after they graduated from high school, according to income and racial/ethnic groups (and after accounting for those students who were enrolled during the last semester for which data were available). They show that low-income students with dual/concurrent enrollment credit completed an associate's degree within a year at about the same rate as their wealthier peers, but a smaller share of them completed within two years and a larger share required more than three years. Students from both income groups with any type of accelerated credit completed associate's degrees in less time than did those without accelerated credit. Except for dual/concurrent enrollment students, less than one in five with accelerated credit finished an associate's degree on time (within two years). The breakouts by racial/ethnic group reveal that Black, non-Hispanic students were least likely among students with dual/concurrent enrollment credit to obtain an associate's degree within two years of high school graduation; more than one in four students of the other racial/ethnic groups completed in that time. Among students with AP credit, Hispanics were least likely to complete within two years. The patterns among IB students by race/ethnicity are unusual, but they are based upon a very few observations and may not be reliable.

Tables D.14a and D.14b present the same information for time between high school graduation and bachelor's

Table D.13b. Time between high school graduation and associate's degree completion by race/ethnicity, selected Florida cohorts¹⁵

	1 year or less		1+ to 2 years		2+ to 3 years		More than 3 years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Asian or Pacific Islander								
No accelerated credit	0	0.0	30	1.6	435	23.4	597	32.1
AP	5	0.7	90	12.7	275	38.7	173	24.4
Dual/concurrent enrollment	12	2.1	106	18.5	209	36.5	131	22.9
IB	0	0.0	8	19.5	16	39.0	9	22.0
Black, non-Hispanic								
No accelerated credit	0	0.0	59	0.7	1,191	13.6	2,096	23.9
AP	3	0.3	94	8.7	303	27.9	252	23.2
Dual/concurrent enrollment	8	0.8	120	11.5	329	31.6	227	21.8
IB	0	0.0	14	19.4	19	26.4	20	27.8
Hispanic								
No accelerated credit	3	0.0	136	1.2	1,762	16.1	3,022	27.5
AP	16	0.4	260	7.2	1,041	28.9	923	25.7
Dual/concurrent enrollment	26	2.1	226	18.5	433	35.5	227	18.6
IB	0	0.0	7	12.1	16	27.6	10	17.2
White, non-Hispanic								
No accelerated credit	8	0.0	573	1.6	8,860	25.0	10,826	30.5
AP	83	0.8	1,282	12.9	4,176	42.0	2,142	21.5
Dual/concurrent enrollment	251	1.8	2,744	19.7	5,601	40.2	2,705	19.4
IB	3	0.8	52	13.1	166	41.9	87	22.0

Note: Data for time-to-associate's degree include students in the 1997 to 2002 cohorts who immediately enrolled in community colleges and eventually earned associate's degrees. They do not include students who were enrolled in fall 2004. Percent values do not sum to 100; the remainder represents the share who were enrolled in fall 2004.

degree completion. For low-income students and Hispanic and Black, non-Hispanic students without accelerated credit, more than seven out of every 10 students needed more than four years to finish a bachelor's degree. Students from all racial/ethnic and income backgrounds completed bachelor's degrees in less time for all types of accelerated credit. However, there remained substantial gaps between shares of low-income and wealthier students who completed within four years. For example, among students with AP credit, the completion rate within four years was 46.9 percent for low-income students versus 55.7 percent for middle- and high-income students. Also, this gap of nearly 9 percent was greater than the 6 percent gap

Table D.14a. Time between high school graduation and bachelor’s degree completion by income group, selected Florida cohorts¹⁶

	3 years or less		3+ to 4 years		4+ to 6 years		More than 6 years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Low-income								
No accelerated credit	19	0.3	1,174	17.2	2,836	41.5	229	3.4
AP	229	2.5	3,054	33.9	3,521	39.1	194	2.2
Dual/ concurrent enrollment	289	4.5	1,913	29.6	1,817	28.1	112	1.7
IB	42	3.7	455	40.1	401	35.4	29	2.6
Not low-income								
No accelerated credit	51	0.5	2,660	24.3	4,512	41.2	282	2.6
AP	678	3.2	9,226	43.0	7,581	35.3	293	1.4
Dual/ concurrent enrollment	795	4.7	6,079	35.6	4,278	25.1	163	1.0
IB	184	6.3	1,334	45.5	903	30.8	33	1.1

between low- and non-low-income students without accelerated credit. The gap between Black, non-Hispanics and White, non-Hispanics also grew among students with IB credit. Comparing Hispanics and White, non-Hispanics, the gap grew slightly among students with AP credit but shrank considerably among students with dual credit.

Conclusions

These findings, drawn from a comprehensive, statewide unit record data system, reveal in substantial detail what happens to students who take part in specific accelerated learning options after they graduate from high school. As a result, this research adds depth to the ongoing work of exploring the relationship between accelerated learning options and educational outcomes.

However, due to lack of controls for selection bias, this descriptive research is very limited in commenting on a cause-and-effect relationship that might exist between accelerated learning and college enrollment, persistence, degree attainment, and time to degree. Furthermore, the missing information about enrollments at private and out-of-state institutions would provide a more complete understanding of the relationships. Economically disadvantaged and historically underrepresented groups are more likely to attend less expensive institutions closer to home. The results probably less completely reflect the actual rates for middle- and high-income students and White, non-Hispanics than for low-income and historically underrepresented students.

Table D.14b. Time between high school graduation and bachelor’s degree completion by race/ethnicity, selected Florida cohorts¹⁷

	3 years or less		3+ to 4 years		4+ to 6 years		More than 6 years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Asian or Pacific Islander								
No accelerated credit	6	0.8	133	18.0	295	40.0	26	3.5
AP	53	2.5	803	37.8	826	38.9	36	1.7
Dual/ concurrent enrollment	56	4.2	418	31.4	365	27.4	19	1.4
IB	20	4.7	189	44.6	147	34.7	5	1.2
Black, non-Hispanic								
No accelerated credit	6	0.1	664	15.9	1,648	39.4	135	3.2
AP	62	2.0	985	31.9	1,182	38.3	69	2.2
Dual/ concurrent enrollment	84	3.3	646	25.6	654	25.9	47	1.9
IB	18	2.9	223	36.4	223	36.4	23	3.8
Hispanic								
No accelerated credit	13	0.6	339	15.8	830	38.7	80	3.7
AP	94	2.4	1,250	31.5	1,492	37.6	87	2.2
Dual/ concurrent enrollment	99	5.5	493	27.5	423	23.6	27	1.5
IB	12	3.1	146	38.3	134	35.2	7	1.8
White, non-Hispanic								
No accelerated credit	42	0.4	2,656	25.5	4,478	42.9	257	2.5
AP	690	3.3	9,108	43.5	7,470	35.7	285	1.4
Dual/ concurrent enrollment	830	4.7	6,364	36.2	4,574	26.0	178	1.0
IB	173	6.7	1,210	46.9	770	29.8	26	1.0

Note: Data for time-to-bachelor’s degree include students in the 1997 to 2000 cohorts who immediately enrolled in the state university system and eventually earned bachelor’s degrees. They do not include students who were enrolled in fall 2004. Percent values do not sum to 100; the remainder represents the share who were enrolled in fall 2004.

Endnotes

¹ These indicators are imperfect. The take-up rate for the free or reduced-price lunch is below the expected rate among high school students, and students only receive a Pell grant if they complete the Free Application for Federal Student Aid (FAFSA) and attend an eligible postsecondary institution. But together they form a commonly used proxy for low-income status in the absence of more precise data. Students who received free or reduced-price lunch at any time between 8th grade and their high school graduation were designated as low-income, as the take-up rate declines during high school. Because Florida's K-20 EDW captures data beginning in the 1995-96 academic year, information about students' participation in the subsidized lunch program going all the way back to 8th grade is complete only for graduates in the class of 2000 and later. For graduates in earlier years, data from the 1995-96 year were used. To ensure that this did not bias the estimates presented in the chapter, they were compared to results generated using only graduates from 2000 and later, which produced no large discrepancies.

² It should be noted that this measure of persistence is defined differently from the traditional way the term is used. It is not necessarily true that students who this variable identified as persisting did so at the same institution, only that they were found to be enrolled in a state community college or in the state university system for two years. Nor is it necessarily true that they needed to maintain enrollment within the first two years of their postsecondary career.

³ Florida's K-20 EDW does not contain information on students enrolled at private or out-of-state institutions. An effort was made to obtain these data from the National Student Clearinghouse, but the data did not include information for all the students in the constructed dataset and arrived too late to be included in the analysis.

⁴ See Appendix B for details on Florida's policies.

⁵ The class of 2003 is compared with the class of 2000 here because data on students' receipt of free and reduced-price lunch from 8th grade are incomplete for the graduating class of 1999 and earlier (as described in note 3).

⁶ C.E. Rouse, "What To Do After High School? The Two-Year vs. Four-Year College Enrollment Decision," R. Ehrenberg, ed., *Contemporary Policy Issues in Education* (Ithaca, NY: ILR Press, 1994), 59-88.

⁷ Data in neither columns nor rows may be accurately summed in this table because there were students who earned more than one type of accelerated credit

and there were students who enrolled for at least one credit hour at a campus of the state university system and a community college. All tables and figures that follow are identical in this respect.

⁸ Interpreting these results is complicated by the possibility that many students with accelerated credit who enrolled at community colleges already had earned postsecondary credits during high school, which may have enabled them to earn their associate's degree or transfer in less than two years.

⁹ The dataset also contained information about college credits awarded to students on the basis of their scores on the College Level Examination Program (CLEP), other exams, or for experiential learning. As these were not the focus of this study, they were not analyzed.

¹⁰ Percentage calculations in Table D.7 include those students still enrolled in fall 2004, the last academic term for which data were available. Among students who enrolled immediately after high school in a community college and were still enrolled in college in fall 2004:

- 28,072 had no accelerated credit.
- 4,327 had AP credit.
- 3,483 had dual credit.
- 143 had IB credit.

This inclusion of students who were enrolled in fall 2004 was necessary because students who graduated high school in more recent years would have had less time to complete a postsecondary degree within the period covered by the data available, which would tend to inflate the shares of early completers. A similar adjustment was made for the remaining tables in the time-to-degree analyses.

¹¹ Among students who enrolled immediately after high school in a state university and were still enrolled in fall 2004:

- 6,008 had no accelerated credit.
- 5,705 had AP credit.
- 8,088 had dual credit.
- 686 had IB credit.

¹² Nancy Hoffman, *Add and Subtract: Dual Enrollment as a State Strategy to Increase Postsecondary Success for Underrepresented Students* (Boston: Jobs for the Future, April 2005).

¹³ Linda Knopp, *Remedial Education: An Undergraduate Student Profile* (Washington, D.C.: American Council on Education Research Brief 6, no. 8, 1995); *They Came to College? A Remedial/Developmental Profile of First-Time Freshmen in SREB States* (Atlanta: Southern Regional Education Board, 1991).

¹⁴ Among students who enrolled immediately after high school in a community college and were still enrolled in fall 2004:

- 9,974 low-income and 18,098 non-low-income students had no accelerated credit.
- 1,600 low-income and 2,727 non-low-income students had AP credit.
- 922 low-income and 2,561 non-low-income students had dual credit.
- 40 low-income and 103 non-low-income students had IB credit.

¹⁵ Among students who enrolled immediately after high school in a community college and were still enrolled in fall 2004:

- 798 Asian or Pacific Islanders, 5,415 Black, non-Hispanics, 6,055 Hispanics, and 15,177 White, non-Hispanics had no accelerated credit.
- 167 Asian or Pacific Islanders, 433 Black, non-Hispanics, 1,357 Hispanics, and 2,268 White, non-Hispanics had AP credit.
- 115 Asian or Pacific Islanders, 357 Black, non-Hispanics, 307 Hispanics, and 2,643 White, non-Hispanics had dual credit.
- Eight Asian or Pacific Islanders, 19 Black, non-Hispanics, 25 Hispanics, and 88 White, non-Hispanics had IB credit.

¹⁶ Among students who enrolled immediately after high school in a state university and were still enrolled in fall 2004:

- 2,570 low-income and 3,438 non-low-income students had no accelerated credit.
- 2,011 low-income and 3,694 non-low-income students had AP credit.
- 2,341 low-income and 5,747 non-low-income students had dual credit.
- 207 low-income and 479 non-low-income students had IB credit.

¹⁷ Among students who enrolled immediately after high school in a state university and were still enrolled in fall 2004:

- 278 Asian or Pacific Islanders, 1,731 Black, non-Hispanics, 885 Hispanics, and 2,995 White, non-Hispanics had no accelerated credit.
- 404 Asian or Pacific Islanders, 787 Black, non-Hispanics, 1,044 Hispanics, and 3,379 White, non-Hispanics had AP credit.
- 472 Asian or Pacific Islanders, 1,093 Black, non-Hispanics, 749 Hispanics, and 5,658 White, non-Hispanics had dual credit.
- 63 Asian or Pacific Islanders, 126 Black, non-Hispanics, 82 Hispanics, and 401 White, non-Hispanics had IB credit.

Appendix E

Methodology for Focus Group Study

An integral component of the *Accelerated Learning Options* study was a series of focus groups conducted with high school and college students and supplemented by interviews with high school teachers and guidance counselors. The purpose of these focus groups and interviews was to gain a better understanding of students' perceptions of accelerated learning options, specifically Advanced Placement (AP) and dual/concurrent enrollment, in an effort to inform policymakers, educators, and researchers. This appendix describes the methodology for conducting the focus groups, including how the schools were selected.

In planning the student focus groups, WICHE recognized the importance and value of interviewing high school and college students about their experiences with accelerated learning options. Selection of the schools and postsecondary institutions as focus group sites was based on a set of criteria. For high schools, criteria included: that at least 40 percent of the student body was eligible to receive free or reduced-price lunch and that the school was racially/ethnically diverse. For postsecondary institutions, the main criteria were: representation of Pell-eligible students and racial/ethnic diversity on the campus. Possibilities for the focus groups were restricted to Colorado.

After several eligible schools were identified, WICHE staff contacted the administration of the respective schools and institutions. The high schools then targeted students who met the study's criteria and also included students who participated in accelerated learning. The community college asked students who they knew fit the target profile to participate, and the four-year institution asked a random sample of students who fit the target profile to participate.

WICHE staff commissioned two professional researchers, John Immerwahr and Steve Farkas, to conduct the focus groups, advise on the analysis of the data, and write the chapter. Seven focus groups were conducted during January and February of 2006 at two high schools and two postsecondary institutions. In all, 62 students participated. Students and administrators were assured that they and their schools would remain anonymous. The composition of the groups was:

- Thirteen public high school students, none of whom were participating in accelerated learning and nine of whom were eligible for free or reduced-price lunch.

- Twelve students at the same public high school who were participating in accelerated learning, six of whom were eligible for free or reduced-price lunch.
- Four students at a community college, two of whom had participated in accelerated learning, two of whom had not, and all of whom were Pell-eligible.
- Nine students in a four-year college who were all Pell-eligible, two of whom had participated in accelerated learning.
- Six students in the same four-year college who had participated in accelerated learning, one of whom was Pell-eligible.
- Five students in the same four-year college who had participated in accelerated learning, one of whom was Pell-eligible.
- Thirteen students in a high school where students take college courses as part of their curriculum, with the goal of graduating with an associate's degree, eight of whom were eligible for free or reduced-price lunch.

In addition, three guidance counselors and four AP teachers were interviewed. They gave us their impressions of the factors that guided students in either seeking or avoiding accelerated learning options.

The majority of the high school students were Hispanic or African American and eligible for free or reduced-price lunch, and about half of the college students were eligible for Pell grants. To identify whether students were eligible for free or reduced-price lunch or Pell grants, the focus group moderator distributed a short questionnaire to the students; their names were not recorded.

In transcribing the quotations, the respondents' remarks have been edited somewhat and condensed to make them more readable. We have, in some cases, put together a series of short answers to the moderator's question to create one longer answer, and we have also eliminated some repetition and removed some typical teenage interjections (e.g., "like," "you know," "he goes").