COLLEGE & CAREER READINESS & SUCCESS Center

at American Institutes for Research



Understanding Accelerated Learning Across Secondary and Postsecondary Education

This brief aims to catalog accelerated learning options available within and across secondary and postsecondary education.

As we strive to create an education system that is responsive to the needs of all, we must foster pathways that afford students the opportunity to move through secondary and postsecondary education at an individualized pace that meets their academic needs. Accelerated

learning serves as a promising tool to provide such opportunities to students. This brief catalogs accelerated learning options that are currently being implemented in schools and highlights efforts made both within and across secondary and postsecondary education.





Definitions

Accelerated learning: A broad term that encompasses changes to the traditional time frame in which students accumulate credits.

Credit recovery: A structured means for students to earn missing credits needed for graduation.

Double dosing: A form of credit recovery in which students receive a "double dose" (usually a double period) of an academic subject to ensure that they remain on schedule to complete the necessary credits for graduation. It is typically used in secondary education when students arrive in high school and are underprepared for grade-level work.

Acceleration across secondary and postsecondary education: An opportunity for high school students to enroll in college courses and earn college credit. The programs in this category vary by the location of delivery, the type of instructor, and credit accrual at secondary and postsecondary levels (see the list of programs on page 7).

Accelerated remediation: A postsecondary course sequence that reduces the length of remedial-level English and mathematics courses to enable students to move more quickly into credit-bearing classes.

Prepared for the
College and Career
Readiness and Success
Center (CCRS Center) by the
American Youth Policy Forum,
a lead partner of the
CCRS Center





Accelerated learning options were originally developed to serve as enrichment opportunities for students who were high achievers. Often, these options blurred the lines between secondary and postsecondary education and provided students the opportunity to earn college credit while still in high school. More recently, accelerated learning options also have been used to engage middle and low achievers in their learning and increase academic momentum for underrepresented student populations.

As cataloged in this brief, accelerated learning options operate within secondary and postsecondary education but also serve as a bridge between the two systems. Accelerated learning options that exist within either secondary or postsecondary education typically serve as recuperative strategies for students to accelerate the time period in which they learn content knowledge or earn credits. In accelerated learning options that span secondary and postsecondary education, students access content and earn credits in advance of their formal transition into postsecondary education. This strategy is effective at decreasing students' time to degree because it provides a supported transitional opportunity to ensure that students have the comprehensive set of skills necessary for postsecondary success.

Acceleration Solely at the Secondary Education Level

Acceleration in secondary education has taken many forms and has been used as an engagement strategy with a variety of student populations. In the secondary arena, acceleration in the form of credit recovery or double dosing has been an effective strategy for helping students who are academically at risk get back on track to earn a high school diploma. Although the research base on credit recovery in secondary education is limited, there are some promising findings from evaluations of models that combine double dosing with other student supports. For example, the Talent Development High School model provides double course offerings in both mathematics and English through its Ninth Grade Success Academy. In addition, the Talent Development model offers after-hours credit-recovery programs and other summer and weekend opportunities for students to catch up on work. This model is positively correlated with increases in students' average number of course credits accrued and the percentage of students who successfully transition from Grade 9 to Grade 10. Similarly, Talent Development participants subsequently graduate from high school at higher rates than peers who did not participate (Kemple, Herlihy, & Smith, 2005).

Serving a student population that has reentered high school after dropping out, the Diploma Plus program provides opportunities for credit recovery as well as dual enrollment opportunities once students are academically prepared. Similar to the Talent Development model, Diploma Plus combines acceleration with other student support services, resulting in positive outcomes for students who are overage but undercredited and who are often returning to high school or seeking an alternative pathway to graduation. This success is



evident at the Diploma Plus E3 Academy in Providence, Rhode Island, where gains in literacy (as measured by the Group Reading Assessment and Diagnostic Evaluation) among ninth-grade students during one academic year far exceeded the gains at other schools in Providence, as well as average gains nationally (Commonwealth Corporation, 2007).

Acceleration Across Secondary and Postsecondary Education

Acceleration across secondary and postsecondary education includes strategies that leverage the resources available within each system to provide opportunities for high school students to earn college credit (see "Forms of Acceleration Across Secondary and Postsecondary Education" for examples). Along with being provided opportunities for earning academic credit, participants often learn valuable skills and habits related to college success, including time management, note taking, and the ability to navigate college campuses and offices (Nakkula & Foster, 2007). According to the National Center on Education Statistics, during the 2010–11 academic year, 53 percent of all postsecondary institutions (both two- and four-year institutions) reported that high school students took courses for college credit (Marken, Gray, Lewis, & Ralph, 2013).



3

Forms of Acceleration Across Secondary and Postsecondary Education

The terminology for these programs can vary among states and institutions. We developed the following categories to catalog various programs and demonstrate some differences among the approaches.

Concurrent enrollment: College courses taught by college-approved high school teachers and offered at the high school for both high school and college credit.

Dual enrollment: College courses on a college campus for which students simultaneously earn high school and college credit.

School-based models: Early college high schools and middle college high schools, located on or near a campus of a postsecondary institution, supplement high school course offerings by enrolling students in college courses for both secondary and postsecondary credit.

Advanced coursework: Courses taught by high school faculty for high school credit that include national end-of-course exams to determine student attainment of college credit. Final scores that translate into college credit vary by institution. Examples of advanced coursework include Advanced Placement and International Baccalaureate programs.

Tech Prep: A planned sequence of study in a technical field that typically provides students the opportunity to earn high school credit and postsecondary credit toward a technical certificate or diploma. Federal funding for Tech Prep ended in 2011, but some states have maintained their programs. Others have expanded dual enrollment to include career or technical courses.



It is important to note that career and technical education coursework is the fastest growing type of dual enrollment for secondary students (Karp, Calcagno, Hughes, Jeong, & Bailey, 2007). This trend may be attributed to students' desire for career exploration during high school or their intent to earn industry-recognized credentials to improve their employability during both secondary and postsecondary education (Rodriguez, Hughes, & Belfield, 2012). In addition, Tech Prep requires articulation agreements between secondary and postsecondary education, which facilitate many of the connections necessary to help students build career pathways across secondary and postsecondary education.

Although acceleration across secondary and postsecondary education traditionally has been considered a strategy for academically advanced students, the positive effects of participation in dual enrollment for student populations that are underrepresented in higher education have been well documented (Karp et al., 2007; Rodriguez et al., 2012). For example, the Early College High School network, supported by Jobs for the Future as the coordinating intermediary, serves 77 percent students of color and 57 percent of students from low-income families (Jobs for the Future, 2013). Recently completed research has demonstrated that participation in these schools correlates to long-term postsecondary success. Nearly two thirds of Early College students enrolled in college courses while they were still in high school, whereas less than one fourth of comparison students enrolled. In addition, these students were more likely to enroll in both two-year and four-year institutions as compared with their peers and were 20 times more likely to earn a college credential one year after graduation (American Institutes for Research, 2013). Generally, participation in dual enrollment contributes to improved secondary and postsecondary outcomes for students, such as the increased likelihood of high school graduation (Karp et al., 2007; Rodriguez et al., 2012); the increased likelihood of enrollment in college, particularly four-year universities (Karp, 2007; Rodriguez et al., 2012; Speroni, 2011); improved postsecondary grade point averages; and an increased rate of persistence to the second year of college (Dadgar & Allen, 2011; Eimers & Mullen, 2003).

As part of the efforts to strengthen acceleration opportunities for students, many states and districts are beginning to offer college placement tests in high school to direct students toward the appropriate accelerated learning program, either dual enrollment or targeted inventions such as double dosing. For example, California's Early Assessment Program (EAP) initiative assesses juniors on college-placement exams to better inform course taking during their senior year. Students are directed toward advanced courses or additional preparation based on their EAP test results.



Credit by Exam

Within both secondary and postsecondary education, opportunities exist for students to earn credit by demonstrating content mastery and accelerate progress toward a credential. Credit by exam, also called "testing out," allows students to establish that they understand the material covered in a course and should be awarded credit without the requirement of sitting though a semester- or a yearlong course. Within most academic subjects in secondary and postsecondary education, a standardized end-of-year assessment or exam is typically used to award this credit; however, in some states and institutions, portfolios and the practical demonstration of skills also may be used to award credit.

Acceleration Solely at the Postsecondary Education Level

Although institutions of higher education serve as active partners in the dual enrollment opportunities previously described, they also have created accelerated learning options for students already enrolled within their systems. This is caused in part by the tremendous number of students in need of remediation when enrolling in a postsecondary institution. More than 50 percent of the students entering two-year colleges and nearly 20 percent of those entering four-year universities are placed in remedial classes (Complete College America, 2012). Entering postsecondary education with the need for remediation decreases a student's likelihood of graduation (U.S. Department of Education, 2004). To combat these challenges, many postsecondary institutions offer accelerated remediation programs that provide opportunities for students to move more quickly through remedial coursework and into credit-bearing courses. Accelerated remediation can be successful in getting students through remedial courses and critical gateway courses (e.g., the first level of credit-bearing courses in English and mathematics) that are necessary for obtaining a postsecondary credential.

One example is the FastStart program at the Community College of Denver (CCD), where students complete two semesters of coursework in each term for mathematics, English, or both. Using this compressed model, students are able to more rapidly move through course requirements toward their credentials. Students also receive college- and career-readiness support, primarily through a "navigator," or case manager, who helps students navigate the complex system of postsecondary education and supports to help students fit college into their busy lives. The results have been positive, with 85 percent of the FastStart students completing the English and mathematics compressed sequence of developmental courses within 24 months. By comparison, only 48 percent of all CCD students beginning with a comparable skill level were able to move through the same number of developmental courses within 48 months. Moreover, the study found promising long-term results for students who completed three of the compressed FastStart



mathematics courses within 36 months. Of the FastStart students who completed all three developmental mathematics courses, 61.6 percent were considered to have achieved "college success" at the 36-month follow-up; that is, these students had received either a certificate or a degree, transferred to a four-year college, or were still enrolled (Colorado Community College System, 2009).

In addition, institutions of higher education have been successful at creating accelerated pathways that combine the coursework for a secondary credential with career-focused postsecondary coursework. For example, the Academy for College Excellence at Cabrillo College in California targets educationally disadvantaged students who have high-risk indicators, including the lack of a secondary credential. Once targeted, the Academy for College Excellence enrolls these students in a semester-long, intensive education program. The program begins with an intensive two-week, full-time "foundation course" that emphasizes the individual and collaborative skills necessary for success and allows students to enroll in credit-bearing courses. Students then enter a 13-week, full-time "bridge semester" of six integrated college-level courses, with supplemental student supports built into the curriculum. Students complete 16 associate degree credits during this initial semester, and 78 percent of the participants continue their next semester at Cabrillo College (Navarro, 2008).

Another example is the Integrated Basic Education and Skills Training (I-BEST) program in the state of Washington, which effectively synthesizes secondary and postsecondary coursework for older students and/or adult learners. I-BEST connects workforce training with adult basic education or English as a second language, enabling students to learn literacy and workplace skills simultaneously. Instructors from each course work collaboratively to develop and deliver instruction and move students rapidly to a postsecondary credential in an effort to secure jobs more quickly. Research has found that I-BEST students outperform similar students enrolled in traditional basic skills programs. Participants are three times more likely to earn college credit and nine times more likely to earn a workforce credential than their peers (Washington State Board for Community and Technical Colleges, 2012).

Conclusion

6

Accelerated learning options provide a range of opportunities for students to engage in education at the appropriate academic level and change the time frame in which they earn credits and/or a credential. Both secondary and postsecondary systems have created mechanisms that allow students to recover credits at an accelerated rate to stay on track for graduation. In addition, through dual enrollment, high school students are able to jump-start their postsecondary education by accelerating their trajectory from secondary to postsecondary education.



As states work to develop multiple accelerated learning options both within and across secondary and postsecondary education, they must consider a number of policy facilitators and barriers, including funding, instructor training and credentialing, the representation of credit on transcripts, articulation and the transfer of credits, quality assurances, equitable access, and affordability. A subsequent brief will explore these policy considerations in greater detail.

The following are some resources for learning more about the accelerated learning programs profiled in this brief and other resources in the field. This list is not meant to be comprehensive; it highlights only some of the available resources.

- Accelerated learning options in secondary education
 - Talent Development
 - Diploma Plus
 - Credit recovery programs
- Accelerated learning options across secondary and postsecondary education
 - Jobs for the Future Early College Design
 - Tech-Prep Education
 - Advanced Placement Program
 - International Baccalaureate Program
 - National Alliance of Concurrent Enrollment Partnerships
- Accelerated learning options in postsecondary education
 - Academy for College Excellence
 - Community College of Denver
 - I-BEST

7

- Complete College America
- College Level Examination Program
- Jobs for the Future Back on Track Model
- Community College Research Center
- Education Commission of the States' Getting Past Go
- National Association for Developmental Education
- National Center for Developmental Education



References

- American Institutes for Research. (2013). Early college means early success for students: Results from the Early College High School Initiative Impact Study. Washington, DC: Author. Retrieved from http://www.air.org/files/AIR_ECHSI_Impact_Study_Report_Summary.pdf
- Colorado Community College System. (2009). Remedial math tracking project. Denver: Community College of Denver.
- Commonwealth Corporation. (2007). *Diploma Plus: The four essentials guide*. Boston: Author. Retrieved from https://network.diplomaplus.net/blob/download/40655
- Complete College America. (2012). Remediation: Higher education's bridge to nowhere. Washington, DC: Author. Retrieved from http://www.completecollege.org/docs/CCA-Remediation-final.pdf
- Dadgar, M., & Allen, D. (2011). Thinking beyond enrollment: Postsecondary outcomes of dual enrollment. Paper presented at the meeting of the Association of Education Finance and Policy, New York.
- Eimers, M. T., & Mullen, R. (2003). *Dual credit and Advanced Placement: Do they help prepare students for success in college?* Paper presented at the 43rd Annual Association of Institutional Research Conference, Tampa, FL. Retrieved from https://uminfopoint.umsystem.edu/media/fa/planning/students/dualcreditpaperair.pdf
- Jobs for the Future. (2013). *Early college high schools get results*. Boston: Author. Retrieved from http://www.jff.org/sites/default/files/u3/ECHS_get_results_022513.pdf
- Karp, M. M. (2007). Learning about the role of college student through dual enrollment participation. New York: Community College Research Center. Retrieved from http://ccrc.tc.columbia.edu/media/k2/attachments/learning-role-college-student.pdf
- Karp, M. M., Calcagno, J. C., Hughes, K. L., Jeong, D. W., & Bailey, T. (2007). The postsecondary achievement of participants in dual enrollment: An analysis of student outcomes in two states. St. Paul: University of Minnesota, National Research Center for Career and Technical Education. Retrieved from http://ccrc.tc.columbia.edu/media/k2/attachments/dual-enrollment-student-outcomes.pdf
- Kemple, J. J., Herlihy, C. M., & Smith, T. J. (2005). *Making progress toward graduation: Evidence from the Talent Development high school model.* New York: MDRC. Retrieved from http://www.mdrc.org/sites/default/files/full_432.pdf
- Marken, S., Gray, L., Lewis, L., & Ralph, J. (2013). *Dual enrollment programs and courses for high school students at postsecondary institutions:* 2010–11. Washington: National Center for Education Statistics. Retrieved from http://nces.ed.gov/pubs2013/2013002.pdf
- Nakkula, M., & Foster, K. (2007). Academic identity development: Student experiences in two early college high schools. In N. Hoffman, J. Vargas, A. Venezia, & M. Miller (Eds.), *Minding the gap:* Why integrating high school with college makes sense and how to do it (p. 162). Cambridge, MA: Harvard Education Press.
- Navarro, D. J. (2008). Digital bridge academy: A transformative education to bridge the digital divide. Aptos, CA: Cabrillo College, Digital Bridge Academy. Retrieved from http://www.aypf.org/documents/DBAProgramOverview.pdf
- Rodriguez, O., Hughes, K. L., & Belfield, C. (2012). *Bridging college and careers: Using dual enrollment to enhance career and technical education pathways* (NCPR Working Paper). New York: Teachers College, Columbia University, National Center for Postsecondary Research. Retrieved from http://ccrc.tc.columbia.edu/media/k2/attachments/bridging-college-careers.pdf
- Speroni, C. (2011). High school dual enrollment programs: Are we fast-tracking students too fast? (NCPR Working Paper). New York: Teachers College, Columbia University, National Center for Postsecondary Research. Retrieved from http://www.postsecondaryresearch.org/i/a/document/Speroni_NCPR_DualEnrollment_RegressionDiscontinuity.pdf



U.S. Department of Education. (2004). *The condition of education 2004* (NCES 2004-077). Washington, DC: U.S. Department of Education, National Center for Education Statistics.

Washington State Board for Community and Technical Colleges. (2012). Washington's community and technical colleges Integrated Basic Education and Skills Training (I-BEST). Olympia, WA: Author.



9

1000 Thomas Jefferson Street NW Washington, DC 20007-3835 202.403.5000 | TTY 877.334.3499

www.air.org

This work was originally produced with funds from the U.S Department of Education through the National High School Center under cooperative agreement number S283B050028 and through the College and Career Readiness and Success Center under cooperative agreement number S283B120034. The content does not necessarily reflect the position or policy of the Department of Education, nor does mention or visual representation of trade names, commercial products, or organizations imply endorsement by the federal government.