GOOD POLICY, GOOD PRACTICE II

Improving Outcomes and Productivity in Higher Education: A Guide for Policymakers

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Foreword

This new edition of *Good Policy, Good Practice II* revises and updates our 2007 publication. Like the earlier edition, it responds to one of the questions that is raised most frequently in our work with public policy and education leaders as they begin to address the national and state imperatives to increase the proportion of Americans who enroll in college programs and complete degrees and certificates, and to improve the cost effectiveness and affordability of higher education. Their question is: Are there proven policies, programs, and practices that we can learn from?

The answer is clearly "yes." *Good Policy, Good Practice II* describes some of the programs and practices that hold the most promise for raising educational productivity. This second edition attempts to rectify a shortcoming of the initial report—the need to be explicit about the requirement for convergence of policy and practice. The lack of connection between institutional attempts to improve practice and public policy that supports these innovations explains, in no small part, the limited implementations of many of the innovative educational practices proven to be most effective. We call attention to the need for policy change if current and future innovations are to be systematically developed, supported, replicated, implemented on a large scale, and sustained. Significant progress in the absence of both institutional and policy leadership working in tandem is unlikely.

Part I of the report identifies strategies, programs, and practices that our research finds can raise educational productivity. The examples cited in this report were compiled and organized by the National Center for Higher Education Management Systems and the National Center for Public Policy and Higher Education. We particularly emphasize programs and practices that challenge the conventional wisdom that gains in educational productivity or efficiency must necessarily come at the expense of quality or access. The three strategies and the programs described under each of them are designed to enhance higher education opportunity, educational effectiveness, and cost-effectiveness. They represent broad pathways to improved educational productivity that can be achieved by:

- Improving the preparation of high school students and adults for college-level learning and creating effective transitions between schools and colleges, two- and four-year colleges, and higher education institutions and the workplace.
- Streamlining the educational process, including curriculum and course redesign; adopting educational policies to reduce course repetition; offering incentives for degree completion; and assessing and certifying academic proficiency.
- Accommodating enrollment growth through institutions that specialize in highquality, cost-effective undergraduate education; avoiding "mission creep" and

increases in research capacity that come at the expense of productivity and undergraduate growth; encouraging collaboration to address unmet educational needs of underserved populations and regions; assuring effective utilization of facilities; and encouraging increased reliance (or creation) on nontraditional types of institutions and systems of educational delivery.

The examples provided have been tested by practice. They are not intended to be a comprehensive or definitive inventory of promising ideas, and they do not address theoretical issues. Undoubtedly, there are beneficial and cost-effective educational programs with which we are not familiar or chose not to include. And we emphasize that no single program or policy is a silver bullet for improving educational productivity or raising the number or proportion of college graduates. Every program for raising productivity, improving quality, and containing costs should be examined closely, and then adapted to the conditions of particular states or institutions. Most practices, including the examples we have cited, can have a major impact on educational productivity only if they are implemented on a large scale across many institutions or entire states.

Part II of *Good Policy, Good Practice II* describes the strategies that state policymakers can use, directly and indirectly, to influence innovation and improvement. It is unlikely that systematic productivity gains of the magnitude needed—and that are possible with widespread adoption of the types of strategies identified in Part I—can be achieved without deliberately designed and supportive state policy frameworks. Reorientation of public expenditures, of statutes and regulations, of accountability measures, and, in some instances, of governance structures may be required to raise productivity. The policy strategies are necessarily described in Part II with less specificity than the practices identified in Part I. The strategies are, we believe, relevant to most states, but implementation strategies depend heavily upon state context, thus the reluctance to get too specific. Part II emphasizes the necessity of state policy support and, if needed, policy change. Without long-term state policy leadership and commitment, it is unlikely that even the most promising programs described in Part I can have major impact.

Together, Parts I and II of this document present the solid base of experience available to policy leaders as they seek to raise the higher education attainment of state residents, even in the face of serious financial constraints. There is more experience and knowledge about educational outcomes and about public policies that stimulate and support innovation and improvement than is often recognized—and certainly more than is widely utilized. We urge educators and policymakers to draw upon and improve on these experiences when they, as we believe they must, renew state and national commitments to enhancing student opportunity and success while keeping college affordable for students and states. *Good Policy, Good Practice II* demonstrates that states and institutions have at hand many of the tools needed to assure a viable economic and educational future for their citizens.

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The authors and the sponsoring organizations welcome the responses of readers to this report.

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Introduction

Many issues other than higher education occupy the policy stage, but the nation's ability to compete economically and maintain a vibrant democratic society rests increasingly on the shoulders of education and policy leaders. Never before have so many jobs required higher levels of education. As Anthony Carnevale points out in his recent report,¹ colleges and universities represent only 35% of the entire postsecondary education and training system. But, higher education acts as an important gateway to other parts of the postsecondary learning system, such as employer-provided training and access to the most powerful, flexible workplace technology. As Carnevale notes, college graduates are almost twice as likely as high school graduates to receive formal training from their employers. In other words, education workplace training and workplace technology tend to go hand-in-hand to create an environment for continuing professional education that results in productivity and earnings. As state leaders struggle with the current economic environment, it would be short-sighted to ignore the relationship between higher education opportunity and long-term economic prosperity.

Few states can ignore the imperative to educate more of their population to higher levels of learning, not only to compete with other states, but to compete globally. Over the last 30 years, the average industrialized country has increased postsecondary attainment by about 75%—more than double that of the United States.² As United States college completion rates remain stagnant, competition for talent from abroad increases. The educational aspirations of too many Americans, both young people and working-age adults, have been impeded by outdated educational delivery systems and the rising costs of higher education.

Public policies have also not provided the incentives and accountability mechanisms necessary to reach significantly higher levels of educational attainment. President Obama has set a goal for the United States to once again have the highest proportion of college graduates in the world. In order to meet this goal, the National Center for Higher Education Management Systems (NCHEMS) estimates that 124,000 additional graduates per year are needed—a 4.2% annual increase.³ Some states have also established explicit goals to educate more citizens. However, more attention must be paid to these important issues by policymakers nationwide. No longer can the country be competitive with relatively flat access and success rates from its higher education system. Whether that education comes in the form of a certificate, an associate's, or bachelor's degree—evidence is clear that it is the best strategy for linking citizens to productive employment.

Many of the exemplary practices in this edition focus on the preparation of students for higher education. This is not a surprise, since the focus of state policy attention for the last 25

years has been on improving public schools. More recently states have also focused on college readiness in an effort to link high school preparation with successful college participation. And, only in the last few years have states begun to focus on working-age adult learners, since many states will not be able to meet workforce needs in the coming years by relying primarily upon young adults. This report identifies educational practices and policies to encourage both young adult and working-age adult enrollment and success in higher education.

According to *Measuring Up, The National Report Card on Higher Education* (2008), young Americans who graduate from high school are now more likely to have taken courses that prepare them for college and to enroll in college, compared with the earlier decade or in the 1990s. But far too many of them leave high school unprepared to succeed in college-level courses and need remedial classes when they enroll, even in open access institutions. Larger proportions than in the past fail to graduate from high school; some eventually receive alternative high school certification, principally the GED, but they do not enroll in college in large numbers after they do so.⁴

This report, like the earlier edition, runs counter to the assumption that higher education is locked into an "iron triangle." The "iron triangle" views higher education as constrained by three competing values—access, quality, and cost—and a change to one of the three points of the triangle causes irreparable harm to one or both of the other points. In other words, it is not possible to increase access to higher education for more of our nation's citizens without commensurate increases in cost per student or without a decline in quality. Or, it is not possible to improve quality without a decline in access or increases in cost per student. Or, alternatively, it is not possible to reduce cost per student without declines in both access and quality.

The examples in this report refute the "iron triangle." The good news is there is no shortage of good ideas to draw upon for improving access and quality, while maintaining per student costs. Examples are found at every type of institution: public, private, two-year, and four-year. The bad news is that most of them operate in isolation. They have not been implemented "to scale" or applied systematically by most institutions of higher education. A major reason for this is that states have not developed the policy structure needed to meet future needs. In general, states have been slow to provide the leadership or incentives that require needed changes; their focus has been overwhelmingly on public K–12 education.

This report is divided into two major sections: The first is related to moving students through the system more effectively. It addresses the need to increase both young and working-age adult educational attainment through a variety of strategies. It also highlights strategies related to educational productivity and administrative efficiencies within and between campuses. The second section addresses the kinds of policies and policy frameworks needed to implement and support the kinds of approaches described in the first section. Each section contains brief

descriptions of approaches or policies that have actually been deployed by states or institutions. These are divided into a number of categories within each section, but a given practice or policy may appropriately be included under more than one category.

Part I: Good Practice

STRATEGY 1: IMPROVING PREPARATION FOR CERTIFICATE AND DEGREE COMPLETION FOR YOUNG AND WORKING-AGE ADULTS

- A. Traditional Education Pipeline for Young People: Increasing Readiness for College-Level Work.
 - 1. Increasing Rigor of High School Curriculum
 - 2. College Readiness
 - 3. Acceleration Programs
 - 4. Dual Enrollment
- B. Educational Pathways for Adult Student Re-entry into Higher Education.
 - 1. Preparation for Adult Students
 - 2. Re-entry and Completion of Adult Students

STRATEGY 2: IMPROVING EDUCATIONAL PRODUCTIVITY

- A. Learning Communities
- B. The Three-Year Bachelor's Degree
- C. Course Redesign
- D. Online Learning
- E. Competency-Based Education
- F. "No Frills" College
- G. Reducing Rework
- H. Transfer Policies

STRATEGY 3: ADMINISTRATIVE EFFICIENCIES

Part I: Good Practice

Strategy 1: Improving Preparation for Certificate and Degree Completion for Young and Working-Age Adults

A. Traditional Education Pipeline for Young People: Increasing Readiness for College-Level Work.

1. Increasing Rigor of the High School Curriculum

Improving high school rigor has been a primary strategy states have used to increase the likelihood that students will be ready for postsecondary certificate and degree programs when they graduate. The increase in state standards for high school and the common core standards that some states have adopted, and that many more are considering, all indicate significant attention to increasing the rigor of high school. In addition, some states have adopted a college and career-ready track for all students.

Increase Rigor of High School Curriculum: Examples

South Dakota. The state ensures that all students have access to a college preparatory curriculum regardless of their location by having one of the state universities offer advanced high school courses through distance delivery. In 2003 there were a total of 300 distance courses. In its 2010 Education plan, the state has called for the creation of a statewide virtual high school that will allow students to take online courses 24/7 from any location across the state in order to access courses not available in local districts. The virtual high school will take advantage of accelerated learning courses to help prepare students for higher education. (http://www.sdvs.k12.sd.us)

New York. The Middle College Charter High School is one of the longest-running experiments to increase the rigor of high school in the United States. The Middle College Charter High School is located at LaGuardia Community College. The personalized learning environment connects high school students to the worlds of college and work. Data from the 2008–2009 academic year show an enrollment of 450 and a graduation rate of about 80%, with 75% enrolling in college. More than 100 of the high school students take community college courses while they are in high school. The high school boasts a 95% pass rate for college courses. (http://schools.nyc.gov/SchoolPortals/24/Q520/AboutUs/Statistics/default.htm)

Indiana. Indiana's Core 40 became part of the required high school curriculum in the fall of 2007; all students entering high school at that time were expected to complete the Core 40 as a graduation requirement. The Core 40 is a rigorous sequence of high school classes in the core subjects including English language arts, mathematics, science and social studies, physical education/health and wellness, and electives including world languages, career/technical, and the fine arts. (http://www.doe.in.gov/core40)

2. College Readiness

In addition to increasing the rigor of the high school curriculum, many states are now enacting policies related to college readiness. Even as states increase the rigor of the college preparatory curriculum and create high school exit examinations, nearly 60% of first-year college students are admitted to and arrive at college only to be told that they are not ready for either college math or English language arts. Even students who have done everything they were told to do to prepare for college find, often only when they arrive, that their new institution has deemed them unprepared. As a result, many states have now instituted either P–16 or K–16 education councils to tackle the problems. Few states, however, have taken the first step in college readiness—fully aligning high school standards and assessments with college placement tests that reflect successful college-level work.

Increase College Readiness: Examples

Texas. The Texas Legislature moved aggressively between 2006 and 2009 with comprehensive legislation requiring public schools to strengthen students' readiness for college. Initial legislation in 2006 established a wide-ranging foundation for addressing college readiness through higher standards, assessments, curriculum, professional development, and accountability. This bill required the State Board of Education to incorporate college readiness standards into the state's foundation curriculum; teams of high school and college faculty developed college readiness standards for English language arts, mathematics, science, and social studies. In 2008, the Texas Higher Education Coordinating Board (THECB) adopted, and the Commissioner of Education approved, the subsequent report, Texas College Readiness Standards. The following year, two new bills focused more intensively on assessments, establishing end-of-course exams with separate questions to assess college readiness, and added new provisions for professional development. They also called for the readiness standards to be incorporated into 12th grade college preparatory classes for students unprepared for college-level study. Groups of K-12 teachers and higher education faculty have been working together for nearly a year to design transitional courses in mathematics and English language arts for high school seniors who do not meet the endof-course readiness standards. At the same time, the teams are shaping a statewide plan for teacher development—both in-service and pre-service—to ensure that teachers know the college-ready standards and how to teach them. In 2009, legislators extended and revised earlier college readiness legislation. The combined impact of these bills with the strong emphasis on clear college readiness standards and high expectations was an important consideration in the state's decision not to adopt the national Common Core Standards. This collection of legislation by Texas policymakers provides perhaps the most widespread and far-reaching framework to date among the states for addressing the various components of college readiness. (http://www.sreb.org)

California. The California State University Early Assessment Program is a collaboration between the California Department of Education, the State Board of Education, and the California State University (CSU). The early assessment program is a voluntary eleventh grade assessment that combines the CSU placement exams with the California high school standards. This early assessment identifies whether a student is prepared for college at a point when students still have the time to gain the needed preparation during their high school senior year. Results provide educators with a sense of their readiness—or lack of readiness—for college. In 2009, approximately 367,000 students tested in the eleventh grade for college-ready English and approximately 84,000 tested for college-level math. The exams reveal that 16% of high school juniors are college-ready in English and only 5% in math, indicating the need for early assessment and intervention (and clear signals from higher education about what English and math readiness means) prior to enrolling in the California State University system. (http://www.calstate.edu/eap)

North Dakota. North Dakota is using ACT test results to determine college readiness. While North Dakota has one of the highest college participation rates in the nation (70%), the number of students who are prepared for college is substantially lower. Highlights from the 2009 ACT College Readiness Reports show: 78% of North Dakota's 2008 high school class took the ACT assessment during their sophomore, junior, or senior year. Seventy percent were considered college-ready in English, 47% in math, 57% for reading, and 31% for science. When North Dakota students added an additional year of math (such as trigonometry or calculus) to their core math requirements of Algebra I, II, and geometry, student likelihood of college readiness in math increased from 25 to 65%. Similarly, students who added physics to their general core of general, physical and earth sciences, plus biology and chemistry increased their likelihood of college readiness in science from 28 to 49%. (http://www.act.org/news/data/09/pdf/output/ACT_NorthDakota_Output.pdf)

Achieve. Created in 1996, Achieve helps states raise academic standards and graduation requirements, improve assessments, and strengthen accountability. Its American Diploma Project provides benchmarks in mathematics and English that all students should have reached when they graduate from high school, as defined by business and higher education leaders. The Achieve benchmarks include: four years of grade level English, four years of mathematics with content equivalent that includes Algebra I, II, data analysis, and statistics. For mathematics, Achieve reports several outcomes as a result of this curriculum, including increased rates of bachelor's degree completion and better preparedness for the workforce. Specifically, students who study math through Algebra II in high school are more than twice as likely to earn a four-year degree as those who do not, and the level of math a student reaches is the most accurate predictor of whether that student will earn a bachelor's degree. (http://www.achieve.org)

3. Acceleration Programs

Student acceleration from high school to college has also been an emphasis for state policymakers. The Advanced Placement Program sponsored by the College Board is the best-known and widely used strategy for student acceleration for young adults. Of the high school graduating class of 2009, nearly 16% had an AP experience and scored 3 or higher on an AP exam, meaning they had completed college-level work in a particular subject matter. Eighteen states exceeded the national participation rate of 16%. The 2009 AP report also documents progress in more minority students completing AP classes with a score of 3 or higher.⁷

Acceleration Programs: Examples

Advanced Placement Expansion. Sponsored by the National Governors Association, 51 pilot high schools in six states (Alabama, Georgia, Kentucky, Maine, Nevada, and Wisconsin) have received funds to expand Advanced Placement (AP) courses to minority and low-income students in rural and urban districts. Results show that the number of students in the pilot schools taking AP courses rose 65% to 55,000 and the number of minority and low-income students taking AP exams more than doubled. The percentage of students scoring a 3 or higher on an AP exam (an indication of college-level coursework) increased from 6.6% in 2005–2006 to 8.3% in 2007–2008, while the national average rose less than 1%. Results for the participating states are notable:

- Maine had the largest single year increase in the percentage of high school seniors scoring at mastery (in 2008).
- Alabama had the largest increase in the percentage of African Americans scoring at mastery.
- Alabama, Kentucky, and Nevada used virtual learning technology to substantially expand AP to rural areas.
- As part of their efforts to build a college-going culture, Nevada and Wisconsin institutionalized week-long statewide summer institutes for teachers while Maine established a mentoring initiative for new AP teachers.
- Kentucky used financial incentives for public schools to make AP math and science courses available.
- Arkansas and West Virginia require every high school to offer at least four AP courses in core content areas: English, math, science, and social studies.
- Michigan, Minnesota, and New Mexico require every student to have a college-level learning experience before graduating from high school.
- The Advanced Placement Incentive Program in Dallas, Texas, offers cash bonuses to teachers and students as a result of increased exam scores. This effort is a collaboration of the College Board, the Dallas public schools, and local business leaders.

(http://www.nga.org/Files/pdf/0908APREPORT.PDF)

4. Dual Enrollment

States have also taken an active interest in sponsoring dual enrollment programs that allow students to be concurrently enrolled in both high school and college. In their report, *Accelerated Learning Options: Moving the Needle on Access and Success* (2006), Western Interstate Commission for Higher Education (WICHE) identifies 42 states that have policies in place related to dual enrollment (or the concurrent enrollment of students in high school and postsecondary education).

Dual Enrollment: Examples

Florida and New York. A study of dual enrollment in Florida and New York found that taking dual enrollment courses was associated with higher rates of high school graduation, enrollment in two-year and four-year colleges, and academic performance in college. A review of 299,685 Florida students who had taken dual enrollment courses while enrolled in high school showed that these students had higher college grade point averages and more college credits three years after high school graduation than similar students who had not participated in dual enrollment. A review of 2,303 student records in New York found those in the College Now Dual Enrollment Program were more likely to pursue a bachelor's degree and have better college grades than first semester students of similar backgrounds who did not participate in dual enrollment. Researchers also found that male and low-income students benefited more from dual enrollment participation than their female and higher-income peers. (http://ccrc.tc.columbia.edu/Publication.asp?UID=578)

Washington. Washington's Running Start program reaches about 10% of the state's high school juniors and seniors. Running Start provides opportunities for high school students to enroll in community college or public four-year institutions. In 2009, Running Start students who transferred their credits to four-year institutions completed bachelor's degrees with an average of 33 fewer state supported credits than students who entered four-year institutions as freshmen, resulting in lower net costs for both the student and the state. Once in college, Running Start students also appear to perform as well as, and in some cases better than, other college students. (http://www.k12.wa.us/runningstart/default.aspx)

Early College High School. Early college high schools blend high school and college in a rigorous and supportive program, reducing the time it takes to complete a high school diploma and the first two years of college. The national Early College High School Initiative initiated by Jobs for the Future (JFF) in 2002 has grown to the point that more than 200 such high schools are operating in 24 states. As of 2008–2009, 96 of the total 201 early college schools had completed their expansion to include grades 9–12, which means that nearly half of the schools have had a graduating class. Across this network, 41,972 students were enrolled in 2008–2009, according to JFF. Initial results are promising:

• The four-year college graduation rate for students who attended early colleges for 2008 was approximately 92%;

- 40% of graduates at early college schools open for four or more years earned more than one year of college credit while in early college;
- 11% of graduates at early college schools open for four or more years earned two years of college credit or an associate's degree;
- 83% of early college graduates earned at least some college credits, indicating that they
 gained concrete knowledge about what it takes to succeed in postsecondary education.

Approximately 89% of the early college graduates in 2008 went on to some form of postsecondary education in the fall of that year. According to the National Center for Education Statistics (NCES) about 66% of all high school graduates nationally enroll in college immediately after high school (for 2006, the most recent year available). Compared with national averages, a higher percentage of early college students are of color and from low-income families, which makes these college-going rates more striking. (http://www.earlycolleges.org/publications.html)

B. Educational Pathways for Adult Student Re-entry into Higher Education.

Increasingly states are focusing on the importance of educating adults in order to meet their current and future workforce needs. In fact, in order for the United States to once again lead the world in postsecondary attainment, 32 states must provide more incentives and opportunities for working-age adults to enter and complete postsecondary educational programs.

1. Preparation for Adult Students

Many adults have not completed high school nor do they have the academic knowledge and skills necessary for college-level work. States have begun to work on both of these issues, although efforts to draw adult students back into educational pathways have not been easy since they have not been the focus of educational priorities of most states.

Preparation for Adult Students: Examples

Rhode Island. The College Readiness Program at the University of Rhode Island is targeted at adults who were not enrolled in college preparatory programs in high school or earned a GED and lack the required courses and academic skills to gain admission to a four-year institution. The College Readiness Program offers qualified students the opportunity to take the missing courses at no cost. The program is supported with grant funds. Targeted coursework includes math, science, Spanish, and writing/English. Each class meets once a week from September to May for two hours in the late afternoons, evenings, or Saturdays. Support services include academic counseling, advising, tutoring, mid-semester academic evaluation, financial aid, and help completing college admission applications. Once students complete the required coursework with a grade of C or better, they will be directed to a university or college that best addresses their aspirations and academic competencies. (For additional information, contact Leo DiMaio, 401-277-5304, 80 Washington Street, Room 449, Providence, RI 02903.)

Kentucky. Kentucky has built a collaborative and systemic model to encourage its one million adults to complete high school and enroll in postsecondary education to improve literacy. Kentucky Adult Education funds adult education centers in all 120 counties to improve an individual's ability to read, write and speak in English and function effectively in the workplace, family, and society. Services are provided locally by school systems, community and technical colleges, community-based organizations, educational cooperatives, universities or local government. Adult education services provide academic skills instruction, GED preparation, and reading instruction for eligible adults. Adult education assists adults in improving educational attainment levels and successfully entering employment and continuing education. The instruction may also include life skills, employability skills, and computer literacy. As of 2008–2009, Kentucky has approximately 28,000 adults in basic literacy instruction; 8,276 in GED preparation courses; and 4,000 in second language instruction. Through the collaborative model, Kentucky can provide policymakers with specific data regarding the success of GED programs for adults. (http://www.kyae.ky.gov)

Tennessee. Tennessee is among the majority of states that cannot reach international competitiveness without educating significant numbers of adults. In response to that concern, Tennessee conducted a "policy audit" to identify the barriers to adult participation and completion of postsecondary education. Among the findings of the policy audit, Tennessee recommended that the following promising policy issues be addressed to improve adult participation and completion: 1) more flexible academic calendars; 2) providing accelerated degree options, as well as an adult degree completion program; 3) offering a wider variety of course delivery methods; 4) expanding the use of prior learning assessment; and 5) including part-time students in student financial aid programs. (http://www.tn.gov/moa/documents/TNPolicyAuditMakOppAfford.pdf)

2. Re-entry and Completion of Adult Learners

Credit for Prior Learning Program. Sponsored by the Council for Adult and Experiential Learning (CAEL) and the American Council on Education (ACE), these organizations have developed a process called "Prior Learning Assessment (PLA)" in which colleges and universities evaluate and award credit for prior learning when they determine it to be similar in content, depth, and breadth to what they consider college-level learning. Prior Learning Assessments includes options such as:

- Experiential Learning Assessments: individualized student portfolios or interviews;
- Evaluation of Local Training: program evaluations done by individual colleges of non-collegiate instructional programs;
- American Council on Education Guides: published credit recommendations for formal instructional programs offered by non-collegiate agencies, both civilian employers and the military. (http://www.cael.org/pla.htm)

Challenge Exams. Challenge exams are tests developed to verify learning achievement; they can be administered either with or without an accompanying instructional program. These examination-based programs include programs such as the College Level Examination Program (CLEP). CLEP consists of a series of examinations that test an individual's college-level knowledge gained through coursework, independent study, cultural pursuits, travel, special interests, military service schools, and professional development. The American Council on Education (ACE) recommends the minimum score for awarding credit (as it does for other such challenge examinations) but each institution determines its acceptable score and the amount of credit granted for each examination. CLEP General and Subject examinations are accepted for credit by more than 2,900 colleges and universities. Similarly, the Excelsior College Examination Program (formerly, Regents College Exams or ACT/PEP Exams), offered by Excelsior College, New York, and the DANTES Subject Standardized Tests (DSST) Program, conducted by the Chauncey Group International, a division of Thomson Prometric, test knowledge of basic entrylevel college material.

WICHE. The Western Interstate Commmission for Higher Education (WICHE) has developed a promising program with selected states called "Non-Traditional No More." Participating states were selected through a competitive process to identify their "ready adult" population—those adults who are close to having enough credits to obtain a degree but have not yet returned to college. The project employs two strategies: 1) identify ready adults and 2) build a path to college success. The first process includes mining state data systems with public and private partners to identify each state's "ready adults." The second strategy focuses on academic policies, financial aid/financing, student support services, and communication to reach out to the adult population in each state. The following states are program participants: Arkansas, Colorado, Nevada, New Jersey, and South Dakota. (http://www.wiche.edu/ntnm)

Graduate! Philadelphia. (G!P) was established in 2005 to increase the number of adults with college degrees in the greater Philadelphia region. A joint initiative of the Philadelphia Workforce Investment Board and the United Way of Southeastern Philadelphia, G!P operates in partnership with 18 colleges enrolling 37,000 adult students. Its partners are employers, labor unions, social service organizations, the CareerLink system, the Greater Philadelphia Chamber of Commerce, and the Philadelphia city government. G!P is recognized as the region's primary strategy for increasing adult college attainment and an "honest broker" for this work. G!P has generated encouraging outcomes through its innovative regional college access and success program for "comebackers," particularly for underrepresented groups: 70% of adults served are African American, 90% are low- to moderate-income, and most are first-generation college students. G!P's initial results are promising. It has achieved a 52% college re-enrollment rate for program participants with a 95% retention rate once they are back in college. (http://www.graduatephiladelphia.org)

Washington. The Integrated Basic Education and Skills Training (I-BEST) pairs an adult basic education/ESL instructor and a professional/technical instructor so that students gain both skill sets at the same time. I-BEST programs help students build first-year momentum for earning college credits, thereby increasing their preparation and possibilities for continuing their education. A report by the Washington State Board for Community and Technical Colleges (SBCTC) shared findings for both basic skills students at all colleges and those enrolled in I-BEST programs. Colleges reported serving some 45,000 basic skills students in 2006–2007. Twenty-four colleges offered I-BEST programs and reported 900 student enrollments in the same period. Looking only at the 24 colleges that offered I-BEST, access to further college coursework increased 55% for students in those colleges (from 1,386 to 2,013, or a 45% increase for ABE/ GED (Adult Basic Education/General Education Development) students after I-BEST; and from 430 to 703, or a 61% increase for ESL students after I-BEST). Another study of I-BEST results showed that over a two-year tracking period of I-BEST students compared with other basic skills students, I-BEST students were more likely than others to: 1) continue into creditbearing coursework; 2) earn credits that count toward a college credential; 3) earn occupational certificates; and 4) show gains on basic skills tests. (http://www.sbctc.edu/college/education/ resh_rpt_08_1_student_achieve_basic_skills_003.pdf)

New Mexico. The University of New Mexico has created the Graduation Program that specifies a pathway for its former students to return and complete their degrees. From 1997–2009, the program has systematically tracked down nearly 5,000 students who have stopped-out and are eligible for the project. Of those who are eligible, approximately 2,600 have returned to UNM and 71% have graduated. Forty-two percent of these graduates are minority students. (http://www.unm.edu/graduationproject)

STRATEGY 2: IMPROVING EDUCATIONAL PRODUCTIVITY

In addition to moving more students through these educational pathways, states and institutions must find ways to improve the educational productivity of students. Stated more simply, they need to get more learning for every dollar spent. Educational productivity combines the concepts of better educational practice and finance. Examples in this section include educational practices intended to improve student retention and completion as well as to use educational resources (faculty time, funding, etc.) in a more effective way. They include: A) learning communities; B) the three-year degree; C) course redesign; D) online learning; E) competency-based learning; F) "no frills" colleges; G) on-time college completion; and H) transfer from two-to four-year institutions.

A. Learning Communities

Learning Communities generally involve assigning students in cohort groups to learn from one another and to take a program of study which the faculty has intentionally structured for the next step in the students' academic program. Definitions of Learning Communities vary slightly from campus to campus depending upon the focus of the academic program.

Learning Communities: Example

Kingsborough Community College has been a leader in creating learning communities, assigning freshman students of up to 25 per cohort to take a program of three "linked" courses: English; a general education course such as art, biology, or psychology; and a student development course. Courses are taught by faculty and student development instructors to make sure student learning objectives are clear and to connect students to any necessary services on campus (writing labs, counseling, etc). An evaluation of the program by MDRC, formerly Manpower Demonstration Research Corporation (a not-for-profit research and evaluation organization), showed that students felt more engaged in the campus community compared to those assigned to the regular course program, and students in learning communities attempted and passed more courses and earned more credits during their first semester than students not in learning communities. Also, students in learning communities were more likely to take and pass English skills assessment tests that are required for graduation or transfer. Overall, retention rate from fall 2008 to fall 2009 was 74.8% for learning community students compared to 67.4% for other first-time freshmen. (http://www.mdrc.org/publications/473/overview.html)

B. Three-year Bachelor's Degree Program

These programs accelerate the student progression associated with a traditional four-year degree program into three years. In some cases, this simply means taking all the requisite courses over a shorter time period using accelerated course formats and year-round attendance. In other cases, curriculum content and structure are redesigned to ensure that students can complete the program within three years.

Three-Year Bachelor's Degree: Examples

Hartwick College. This private institution in New York implemented a three-year degree program in September 2009. Students complete the standard 120 credits in three years, with a savings to students of about \$40,000. Instead of taking 30 credits per year, these students take 40 credits and receive priority in course registration. During January, Hartwick sponsors a four-week short course in which students may earn three to four credits on- or off-campus, including international sites. Summer course enrollment is not required for the three-year degree. Since the program is relatively new, about 20 students have enrolled in the program. (http://www.hartwick.edu/x26227.xml)

Lipscomb University. This private institution in Nashville, Tennessee, has also recently implemented a three-year degree program. Students in the program are required to enroll in summer school and complete the eight-semester course requirements for a bachelor's degree. The University estimates that the three-year degree saves students approximately \$11,000 in tuition. (http://www.lipscomb.edu/page.asp?Page=7402)

Manchester College. This Indiana college is in the first year of a three-year option for students. The College advertises this option as a way for students to save money on college tuition and start earning salaries a year ahead of schedule. Known as the "Fast Forward" program, selected students admitted to the college are given the option of acceleration. These students take an average of 16 credits a semester and courses online during the summer to finish in three years. The institution estimates that Manchester students utilizing the acceleration option save a total of \$25,000. In its first year, 4% of the freshman class enrolled in the accelerated program. (http://fastforward.manchester.edu)

C. Course redesign.

Course redesigns have the potential to simultaneously improve student learning outcomes and reduce institutional costs. Leadership for course redesign has come primarily from the work of Carol Twigg and her colleagues at the National Center for Academic Transformation (NCAT). Of the original 30 colleges and universities using this model, with support from the Pew Charitable Trusts, 25 resulted in learning outcomes equivalent to or better than those achieved by traditional formats. Of the 24 projects that measured retention, 18 reported a noticeable decrease in drop/failure/withdrawal rates, as well as higher course completion rates. And, all 30 sites reduced their costs by 37% on average per course. Other positive outcomes included better student attitudes toward the subject matter and increased student and faculty satisfaction with the new mode of instruction. Since the original 30 sites, many more have been added, including state systems of higher education and community college developmental education programs. Detailed results, as well as descriptions of the redesign themselves, can be found at the NCAT Web site. (See http://www.thencat.org/.)

The models described below have demonstrated their effectiveness both in improved student outcomes and reduced costs.

Course Redesign: Examples

Virginia Tech. Using a model that has existed since the 1990s, the Virginia Tech Math Emporium is a learning center for the study of mathematics. Over 500 Apple Computer workstations are arranged in hexagonal pods with six computers in each. A large meeting area is equipped with a computer projection system, along with an overhead projector and whiteboard for formal

presentations. The Emporium is open to Virginia Tech students 24 hours a day, 7 days a week while classes are in session. Math staff is available 60 hours a week to assist students enrolled in any of the seven courses offered through the Math Emporium. Approximately 5,000 students are served each year. Courses converted to the Emporium learning model have reduced costs on average 75%, primarily because the personal assistance offered at the Emporium requires far fewer and lower paid personnel than the traditional course format. Studies of student performance in the Math Emporium classes show that students do as well or better than students from traditional math classes. (http://www.emporium.vt.edu)

Cleveland State Community College Math Emporium Model. A newer program, the Cleveland State Community College (Tennessee) Math Emporium Model, reinforces these results. Here traditional lectures in basic math, elementary algebra, and intermediate algebra for remedial students are replaced by a large computer lab where students solve math problems and, when they need assistance, work with on-site faculty members and tutors. Courses are arranged in weekly modules with accompanying quizzes that can be taken and retaken until students are ready to progress to the next level. Cleveland assessed students' learning outcomes by comparing common content items from selected departmental final exams administered traditionally during the previous five years to redesigned sections in spring and fall 2008. Common test items from the traditional and redesigned courses showed impressive improvements:

- In the basic math course, common test items answered correctly increased from 73.3% to 86.2% in fall 2008.
- In the Elementary Algebra course, the number of common test items answered correctly increased from 70.3% to 86.2% and to 83.8% in successive terms.
- In the Intermediate Algebra course, the number of common test items answered correctly increased from 77.3% to 90.1% and 88.7% in successive terms.
- In addition to improved test performance, student completion of courses also increased. After the redesign during the fall 2008, 72% earned an A, B, or C, which represents a 31% increase in course completion rates.

(http://www.thencat.org/States/TN/Abstracts/CSCC%20Algebra_Abstract.htm)

D. Online learning.

More colleges and universities are turning to online learning as a way to meet increased interest in higher education as well as reduce costs. Some traditional colleges also have online learning options for students; other colleges primarily, if not exclusively, deliver online education.

Online Learning: Example

Rio Salado College. Rio Salado, a Maricopa Community College, focuses on offering online learning opportunities to the communities it serves. As the largest of the 10 Maricopa Community Colleges, Rio Salado serves 60,000 credit and non-credit students annually. Rio Salado has been a pioneer in online learning development and even partnered with industry leaders Microsoft and Dell to develop a custom online learning platform, RioLearn. Rio Salado offers courses starting every Monday, which allows students to select a course without semester restrictions. Rio Salado is also cost-effective at \$71 per credit. (http://www.riosalado.edu/Pages/default.aspx)

E. Competency-based education.

Competency-based education provides the opportunity for students to demonstrate their knowledge and skills through rigorous assessments in different subject areas.

Competency-based Education: Example

Western Governors University (WGU). WGU in Salt Lake City, Utah, is a non-profit online university founded in 1995 and supported by 19 governors. WGU was chartered in 1996, incorporated as a private, non-profit university in 1997, and began accepting students in 1999. Today, WGU has grown into a national university serving over 17,000 students across 50 states and is growing about 30% each year. WGU offers online, competency-based degrees to working adults. The University is regionally accredited and its teacher education program recently received full accreditation from the National Council for Accreditation of Teacher Education (NCATE)—the first online university program to do so. The average age of the WGU student is 36, most work fulltime, and 80% of students are either low-income, minority, or first-generation college students. As a private non-profit university, WGU is self-sustaining on tuition of \$5,800 for a 12-month year. Tuition increases over the last four years have not exceeded \$200. Current degree offerings include bachelor's and master's degrees in business, information technology, K-12 teacher education, and health professions (including nursing). As a competency-based institution, degrees are awarded to students when they can demonstrate mastery of competencies through a series of assessments including objective assessments, projects, portfolios, and performance tasks. WGU mentors advise students what educational experiences might help them reach competencies. Recently WGU has established a partnership with Indiana and is exploring other state partnerships to accommodate increased demand for higher education. (http://www.wgu. edu)

F. "No Frills" College.

A promising idea emerging in Arizona and other states is a "no-frills" college that provides students with basic academic and support services to earn degrees. Institutions reduce costs by reducing expensive amenities, such as physical fitness centers, etc.

No Frills College: Example

Arizona. Arizona's public universities plan to develop four-year college programs in high-demand majors, such as teacher education. Eligible students for these high-demand programs would earn at least six college credits in their senior year of high school, would be admitted to Arizona State University, Northern Arizona University, or the University of Arizona. However, they would be assigned by their university to attend a community college for their first three years. During this time, they would pay the significantly smaller community college tuition, around \$5,800 a year, the most students can receive from the Federal Pell Grant Program. While students would take classes at the community college, the program would be controlled by the respective four-year institutions. Arizona officials estimate that the plan could reduce the price of the baccalaureate degree by nearly 60%, since students would pay university tuition only for one year. (http://blogs.abcnews.com/campuschatter/2009/06/arizona-mulls-nofrills-college-plan. html)

G. Reducing rework.

A major inefficiency in the education system can be described as "re-work," a term borrowed from industrial engineering. In an educational setting, rework can be considered the presentation of the same material to the same students multiple times. Some of this rework results from students failing courses and repeating them in subsequent terms. The majority of rework, however, is caused by academic policies that:

- Allow students to drop courses without academic penalty—in some cases as late as the week before finals;
- Allow students to repeat courses they have already completed in order to attain higher grades; and
- Force students to repeat failed courses in their entirety instead of repeating those components they failed—which is a problem particularly for developmental and basic skills courses.

Each student who drops or repeats a course is filling a seat that could be filled by another student. Several tools can promote improvement in course completion. Some are regulatory, while others create incentives for desired behaviors. Regulatory approaches include requiring institutional academic policies that are less forgiving of drops and withdrawals. Tightening these policies can take the form of:

- Counting all credits for which a student enrolls against the maximum number that will be underwritten with state funds (commonly known as the "cap");
- Reducing the time period during which no-penalty drops are allowed;
- Limiting the number of times a student may enroll in the same course.

States can also encourage institutions to improve course completion rates by changing the reporting date (known as the "census date") that enrollments are counted for funding purposes. States commonly base funding allocations on enrollments that are calculated early in the academic term, frequently during the third week. Once the census date passes, institutions have few incentives to minimize withdrawals; in fact, if students withdraw, faculty can teach smaller classes, and students who drop the course one semester are likely to reenroll later and be counted for funding purposes. A very different dynamic would be created if course completions rather than third-week enrollments were used as the basis for state funding allocations.

In addition to institutional policies to reduce rework, institutions can reduce the number of credit hours to earn a degree, particularly for advanced students. A number of states have enacted policies to reduce the number of excess credit hours earned by undergraduate students by limiting state support for those hours. These policies either penalize students for accumulating excessive credit hours beyond degree requirements or penalize students who retake classes multiple times. These good practices are promoted by supportive state policy such as those described below.

Reducing Coursework: Examples

North Carolina. A policy enacted in 1994 at the University of North Carolina prohibits four-year bachelor's degree programs from exceeding 128 credit hours. All UNC institutions are required to levy a 25% surcharge on tuition for students taking more than 140 credit hours in a four-year bachelor's degree program or who have taken more than 110% of the credits required to complete a five-year bachelor's degree program.

A **Florida** report estimates that in 2004–2005 students earning excess credit hours cost the state 62 million dollars. As a result, a student who enrolls in a given course more than two times must pay out-of-state tuition for a third enrollment in that particular course. Furthermore the college or university at which the student is enrolled does not receive state funding to subsidize the student's enrollment in the course. Students who withdraw from or fail a class because of extenuating circumstances are given a one-time exception to this rule.

Texas has one of the most comprehensive policies for reducing excess coursework in the Southern Regional Education Board (SREB) region. The law requires state colleges and universities to charge out-of-state tuition to undergraduate students who, at the beginning of a semester, have completed an excess number of credit hours, which are defined as 30 or more credit hours beyond degree requirements. After a student exceeds the excess credit hour limit, the student's college or university no longer receives a state subsidy for that student. Undergraduates who retake courses are required to pay for them at the out-of-state tuition rate. Texas also has incentives for students to finish their degree programs on time, such as the B-On-Time Loan Programs that provides forgivable loans based on grades and timely graduation. In addition, students who complete their undergraduate degrees with a minimum number of credits can earn a tuition rebate of up to \$1,000. The tuition rebate awards students who complete their bachelor's degrees with 3 or fewer credit hours beyond the number required; AP classes and dual enrollment are also included.

Virginia charges out-of-state tuition to any in-state student who completes 125% of the credit hours required for that student's degree.

Maryland. Due to enrollment growth, the University of Maryland now requires some first-time freshmen to enroll in the spring instead of the fall. They are also required to earn at least 12 credits before arriving on campus, either through the University of Maryland's largely online University College or at a Maryland Community College. Students also have the option of earning these credits through independent study, undergraduate research, study abroad, service learning, internships, credit by exam, and advanced placement credits. (http://publications.sreb. org/2007/07S05_Credit_Hours.pdf)

H. Transfer policies.

Transfer policies are critically important for states to focus on as a way to increase the educational attainment of their populations. Nine states account for 72% of the projected United States population growth between now and 2025. 11 Of these nine, six educate most of their students in two-year colleges (Arizona, California, Florida, Texas, Washington, and Georgia). Unless transfer becomes a seamless process for students and does not require students to take excessive credits to earn a bachelor's degree, it is unlikely that these states will make dramatic improvements in bachelor's degree attainment.

Policies across the states with regard to community colleges vary tremendously. In some states, such as Florida, most students are required to earn an associate's degree before they transfer; in California, many students transfer after only a few credits. In Georgia, community colleges function like "junior colleges" and are governed inside the Georgia Board of Regents. A separate technical college system provides for workforce training. As the goals of these systems vary, the need for students to easily articulate from one to another remains a high priority for institutional and public policy leaders to address in order to improve transfer rates and baccalaureate degree achievement. In a recent report¹² comparing transfer policies in eight states, the following lessons emerged:

- States seeking statewide reform in this arena must have an entity capable of leading the development and implementation of any transfer reform initiative.
- The more standardized the general education curriculum, the smoother the transfer path.
- It is important to go beyond the general education curriculum and integrate standardized lower division curricula that prepare students for upper division work in specific (most popular) majors.
- Simplifying and standardizing the transfer process is more effective than developing communication tools that help students navigate a complex process. (See http://www.csus.edu/ihelp/pdfs/r_transfer_report_08-09.pdf.)

Transfer Policies and Programs: Examples

Florida. By design, most students in Florida begin postsecondary education in a community college. In fact, the admission rate to state universities is higher for students with an Associate of Arts degree than for freshman applicants (76% vs. 57%). Also, students entering Florida public four-year institutions as transfers graduate with a similar number of total credits as native freshmen, at 138 and 135 respectively.

Arizona. Transfer policies in Arizona have improved, according to a 2007 study. The transfer policy changes resulted in students completing the bachelor's degree with nearly one semester less credit than was the case five years earlier. The study found that students transferring after meeting the Arizona General Education Curriculum (AGEC) requirements were more likely to graduate within a specified time period than students transferring with community college credits but without having followed a specified transfer pathway. (For more information about AGEC requirements, see: http://catalog.arizona.edu/2008-09/policies/agec.htm)

Arizona. The Maricopa Community Colleges and Arizona State University, the two largest providers of higher education in the state, have a history of collaborating to support transfer students. Annually, approximately 5,000 students from Maricopa transfer to ASU. The two institutions have created the Maricopa-ASU Pathways Program (MAPP). MAPP is an associate's degree to bachelor's degree transfer program that outlines a prescribed sequence of classes for students to take at the community college to prepare them for a degree at ASU. If students sign up for MAPP at the community college, they are eligible for a special tuition program called the Tuition Commitment Program, which limits the tuition increases (capped at 5% increase/year) during their completion of the bachelor's degree. In addition, ASU and the Maricopa Community College District announced in January 2009 an expanded partnership to double the number of students who complete a community college degree and go on to graduate from ASU. (http://www.maricopa.edu/alliance/docs/AllianceFAQ.pdf)

Washington. Washington focuses its policy on transfer students going into the sciences and engineering by creating an Associate of Science-Transfer Degree (AS-T) pathway. The state found that students earning the AS-T transfer to a university at a higher rate complete fewer credits to degree and are more likely to earn a bachelor's degree than students who follow the more general Direct Transfer Agreement with a science-related concentration. Also, the three-year graduation rate for students transferring to a Washington public university with an AS-T degree improved from 63% in the late 1990s to 71% in 2006–2007.

STRATEGY 3: ADMINISTRATIVE EFFICIENCIES

The prolonged recession has forced colleges and universities to undertake actions to improve efficiencies. These initiatives are found on individual campuses, within statewide systems of higher education, and across states.

Administrative Efficiencies: Examples

Ohio. The Ohio Board of Regents created the Advisory Committee on Efficiency in the University System of Ohio to examine public colleges' and universities' business practices, identify potential improvements, and promote adoption of best practices throughout the system. The committee comprises the University System of Ohio's trustees, presidents, faculty and staff members, students, and business leaders. The Advisory Committee is establishing benchmarks for efficiency, the implementation of the efficiency targets, and best practice strategies. For example, the University of Akron and Loraine Community College have cut unnecessary costs and improved service by sharing and streamlining non-competing business processes in areas such as financial services and human resources. Kent State University has reduced costs by consolidating network operations, data centers and servers, and by outsourcing software applications, such as email. (For additional information contact: Ohio Board of Regents, 30 East Broad Street, and 36th floor, Columbus, OH 43215-3414 Phone: 614-466-6000.)

The University of Maryland System adopted the Effectiveness and Efficiency Initiative (E&E) in 2004 as its signature program to contain costs while improving overall administrative and academic operations across the system. The overarching goals of the E&E Initiative are to: address increases in effectiveness and efficiencies in the University of Maryland operating model, increase quality, serve more students, and reduce the pressure on tuition. The E&E Initiative provides annual progress reports. According to the latest report, E&E has educated 6% more students while cutting baseline operating costs by 3% and holding average annual tuition increases to less than 2%. Some examples include increasing instructional workload as a measure of productivity at the system's seven comprehensive universities; decreasing student time-to-degree; and increasing four-year graduation rates. Additionally the E&E initiative streamlined its transfer program with Maryland Community Colleges, resulting in fewer lost credits and better integration into four-year programs. Also restructured was the use of spring freshman admission programs to allow institutions to eliminate waiting lists, guarantee admission to greater numbers of qualified students, and counter the loss of students through fall attrition. Officials estimate that E&E cost savings alone have totaled more than \$94 million for the system since its inception. (http://www.usmd.edu/usm/workgroups/EEWorkGroup/eeproject/index.)

Student Exchange. The Western Undergraduate Exchange (WUE) is a program of the Western Interstate Commission for Higher Education (WICHE). Students who are residents of WICHE states may enroll at participating two- and four-year college programs outside of their home state at a reduced tuition rate. WUE reported that 20,072 students participated, and in 2009 this number had increased to 24,670. Total savings to families and/or the state was approximately \$111 million in 2004–2005 and \$173 million in 2009–2010. (http://wiche.edu/info/publications/statReport0910.pdf)

Midwestern Higher Education Compact (MHEC). The Compact follows six major goals in carrying out its compact mission. They are: to enhance productivity through reductions in administrative costs; to encourage student access, completion, and affordability; to facilitate public policy analysis and information exchange; to facilitate regional academic cooperation and services; to promote quality educational programs; and to encourage innovation in the delivery of

educational services. Some of MHEC's cost savings programs include: the *Computing Hardware Program, the Computing Software Program, the Master Property Program* (insurance), and the *Midwest Student Exchange Program.* To date, over 400 institutions and agencies across 12 states have participated in MHEC programs. The cumulative state savings for participating in these programs and other initiatives (through June 2009) total \$397,133,066. (http://www.mhec.org/CostSavingsHomePage)

New England Regional Student Program. New England Board of Higher Education's Tuition Break Program, known as the New England Regional Student Program (RSP), enables thousands of New England residents to enroll at out-of-state New England public colleges and universities at a discount. Students are eligible for the Regional Student Tuition Break program when they enroll in an approved major that is not offered by the public colleges in their own state. In 2004, RSP provided New England students and families with savings of more than \$233,000 annual tuition bills. (http://www.nebhe.org/programs-overview/rsp-tuition-break/overview/)

Part II: Policies that Promote Good Practice

Introduction

Part I of this report described a variety of approaches used by states to make improvements in the educational pathways for students, to improve educational and administrative efficiencies and effectiveness, or to refute the "iron triangle"—that costs, quality, and access cannot be simultaneously addressed.

Part II addresses the policy levers that can assist state leaders in implementing the strategies outlined in Part I. This section of the report is organized around five key policy levers: A) planning and leadership; B) finance; C) accountability; D) regulatory policies; and E) governance. Although the strategies and levers are discussed separately, they should be considered as integrated elements of an overall policy framework; the successful implementation of the strategies will require effective use of the appropriate policy levers. For example, to improve the efficiency of college programs, financial incentives might reward colleges for the courses that students complete, as well as for their enrollment.

Figure 1 shows the relationships between the strategies discussed in Part I of this report and the policy levers in this section.

Planning Improving Finance Accountability Regulatory and Governance Educational **Practices** Leadership **Pathways** Alignment **Improving** preparation for

Figure 1: Policy Leadership

A. Planning and Leadership

As the first part of this report shows, colleges, and universities around the country have the ability to improve access, completion, quality, and costs. While there are other good examples, they operate in isolation and have not been applied to most institutions of higher education.

State policy leaders have not been confronted with fundamental decisions about higher education policy for a very long time. The state higher education policy infrastructure, while not perfect, served the country well until the 1990s. We are now without a sufficient template for solving higher education problems. It is imperative that governors and state legislators take primary responsibility for redesigning public policies in higher education. College presidents and other institutional administrators are operating on an old set of rules, hoping they can manage old systems into the future. They face powerful incentives to resist academic redesign and increased pressure to replace lost government funds with tuition and large capital campaigns. These options are available, at a scale that really matters, to only a few American colleges and universities. For the others—those public institutions that educate more than 70% of all students—changes in their academic and administrative operations are inevitable, if we are to successfully increase the nation's certificate and degree output.

In fact, while it is easy to blame institutions for excesses in tuition, in executive compensation, and failure to meaningfully assess learning outcomes, public policy leaders simply have not led the way in restructuring higher education policies for this century. Part II of this report identifies promising ways to begin this agenda. While specifics differ across states, depending upon different organizational forms, effective and sustained state policy leadership for higher education is critical to local, regional, and national competitiveness.

State policy leadership and statewide governance, finance, and accountability go hand-in-hand in redesigning effective policies for the future. Since the early 1990s, many states have deregulated policy for colleges/universities to such an extent that their ability to make statewide decisions has weakened considerably. As a result, institutions have made decisions in their own interests regarding critical public issues such as access and affordability. These isolated institutional decisions rarely add up to statewide goals, such as the number of educated people the state needs, or the appropriate roles for financing higher education given statewide goals, as well as holding states/institutions accountable for public goals.

Requirements for State Policy Leadership in Higher Education¹³

- A broad-based public entity with a clear charge to increase the state's educational attainment and prepare citizens for the workforce;
- Strength to counter inappropriate political, partisan, institutional, or parochial influences;
- Capacity and responsibility for articulating and monitoring state performance objectives
 for higher education that are supported by the key leaders in the state; objectives should
 be specific and measurable, including quantifiable goals for college preparation, access,
 participation, retention, graduation, and responsiveness to other state needs;
- Engagement of civic, business, and public school leaders beyond state government and higher education leaders;
- Recognition of distinctions between statewide policy—and the public entities and policies
 needed to accomplish it—and institutional governance. The role of statewide policy
 leadership is distinct from the roles of institutional and segmental governing boards;
- Information gathering and analytic capacity to inform the choice of state goals/priorities and to interpret and evaluate statewide and institutional performance in relation to these goals;
- Capacity to bring coherence and coordination in key policy areas, such as the relationship between institutional appropriations, tuition, and financial aid; and,
- Capacity to influence the direction of state resources to ensure accomplishment of these priorities.

1. Policy audit.

One strategy for understanding the capacity for states to undertake change is the "policy audit." An audit of existing higher education policies can be used as a tool to highlight the disconnect between current policies and the state's goals for higher education. It can also shed light on the policy areas in need of most attention and reform. Policy audits in both Tennessee and Ohio informed the development of the state's master planning process.

Policy Audit: Examples

Tennessee. The Tennessee Higher Education Commission (THEC) and the National Center for Higher Education Management Systems (NCHEMS) conducted a review of state policies and practices affecting higher education access, success, and productivity in Tennessee. During this review, NCHEMS, in collaboration with the THEC staff: 1) compiled data about the educational attainment of Tennessee's residents, the education pipeline in the state, and the productivity of the state's system of postsecondary education; 2) reviewed a variety of materials—master plans, funding models, accountability/performance reports, board policies, etc.; and 3) conducted

interviews with postsecondary education leaders in all parts of Tennessee with representatives of the Business Roundtable, key legislators and their staff, governor's staff, and with THEC staff.

These activities served to identify gaps between policies as written and as implemented and point out unintended consequences of some policies. As a result of this review, issues were identified in numerous areas and recommendations addressed each of these issues. Inconsistencies were found between goals and policies in the following areas: 1) college readiness; 2) college placement procedures; 3) developmental education; 4) transfer policies; 5) alignment of policies with needs of adults; 6) geographic access to postsecondary education; 7) relationships between different sectors delivering pre-baccalaureate education; 8) design and implementation of funding formulas; and 9) tuition policy alignment with student financial aid programs. (https://my.tennessee.edu/portal/page?_pageid=600,5785170&_dad=portal&_schema=PORTAL)

Ohio. A policy audit in Ohio was conducted to support the implementation of the University System of Ohio Strategic Plan. An in-depth review of the policies that promoted the goals of the plan revealed the following issues requiring further attention: 1) expectations regarding college readiness; 2) the adult re-entry pipeline, including certifying technical competence in ways that can be transferred for college credit purposes, expanding the capacity to deliver adult basic education, and developing new curricula and assessments aligned with higher expectations and providing professional development for adult educators; 3) remedial and developmental education; 4) expanding the process for transferring industry-recognized credentials from both adult and secondary career-technical programs to college programs; 5) improved coordination among institutions serving the same geographic area; 6) reforming finance policy; and 7) review of the state's student financial aid programs. (http://www.uso.edu/strategicplan)

B. Finance

Finance policy, the most potent weapon in the policy arsenal, can be structured to create powerful incentives to improve educational productivity. Effective finance policies link institutional appropriations, tuition policies, and student financial aid policies. These policies, however, cannot be linked in intentional ways if states are unclear about their policy goals for increased educational attainment and how to achieve them.

Volatile state funding also makes it difficult for educational systems to plan and achieve cost savings. Simply cutting public spending on higher education—more than on other public services—with the hope that tuition will fill the gap is unrealistic. Many colleges/universities that serve middle- and low-income students are reaching the tipping point on tuition increases without facing declines in enrollment, a situation that will not help states improve their overall levels of educational attainment. Policies that reinforce state goals and work in ways that reinforce each other must be developed in the following areas: 1) institutional appropriations and the distribution of appropriations across the states' institutions; 2) tuition and fees and

their relationship to family income; and 3) state financial aid programs. Policies in each of these areas should enable states to achieve their goals, and each of the finance policy areas must be developed as part of a coherent set of policies.

1. Institutional appropriations.

Few states have begun the difficult process of finance policy change. However, some states have moved in this direction, and understanding what they have done is instructive for other states. Some states are explicitly tying funding to student progress and degree attainment, rather than just using enrollment-driven formulas.

Outcomes-Based Funding Models: Examples

Tennessee. The Complete College Tennessee Act of 2010 includes a provision for an outcomes formula model. The act directs the Tennessee Higher Education Commission (THEC), in conjunction with the University of Tennessee, the Tennessee Board of Regents, and state government, to develop a new model to be used for the 2011-2012 budget cycle. The formula funding design is intended to promote outcomes important to the state, such as degree attainment, transfer activity, student retention, etc. The law requires Tennessee to compile a "fact book" related to actual data on these outcomes. "Award points" for these outcomes are provided through the funding formula. Assignment of points is based on the institution's mission. Tennessee officials hope the formula will strengthen links to the state's master plan for higher education, which identifies specific educational attainment goals, etc.; will enhance institutional incentives to focus on student retention; and will introduce a focus on productivity (defined as degree production, transfer activity, student access, education for adult students, etc). The new formula will, officials expect, spread the financial incentives to a larger, more appropriate set of variables - not just student enrollment - and calibrate it specifically to an institution's mission by utilizing the Carnegie Classifications. Currently, the existing funding formula is approximately 60% enrollment driven with incentives heavily focused on student inputs. (http://www.state. tn.us/thec)

Ohio-State Share of Instruction (SSI). In Ohio, state funds have historically been allocated to two- and four-year public institutions through a single enrollment-driven formula with factors for instruction at different levels and in different disciplines determined by analyses of historical costs. Beginning in FY2010, this single formula was replaced by three different formulas for university main campuses, university branch campuses, and community colleges. The key elements of these three formulas are:

 University Main Campuses. The core state subsidy is based on course and program completions. The subsidy attached to course completion continues to reflect historical cost patterns. Additional funds can be awarded for completion by at-risk students. There are separate subsidy elements for doctoral and medical education.

- University Branch Campuses. The core subsidy for branch campuses is based on course completions. Degree completions may be added as a factor in future years. As with the formula for main campuses, the subsidy attached to course completions reflects historical cost patterns, and additional funds can be awarded for completions by at-risk students.
- Community Colleges. The core subsidy for community colleges continues to be enrollment-based in recognition of the significant enrollment swings that occur in this sector. It is planned that the proportion of funding driven by enrollments will decline over time with the addition of a component that rewards achievement of success points. Proposed success points include: completion of first developmental education course, completion of developmental education course(s) with subsequent enrollment in college-level courses, completion of 15 credit hours of college-level instruction, completion of 30 credit hours of college-level instruction, completion of an associate's degree, and transfer to a university.

The new subsidy models were developed in consultation with the institutions. Implementation is being phased in and done in such a way that negative impacts on institutional funding resulting from the new approaches are mitigated. The robust data systems maintained by the Ohio Board of Regents will provide mechanisms for monitoring outcomes. (See http://regents.ohio.gov/legislative/OperatingBudget/TemporaryLaw/ssi.php)

Indiana. Indiana began performance funding in 2003 by establishing an incentive fund to reward research universities that garnered federal research funds. Since then Indiana has passed legislation that links incentive funds for all higher education institutions to performance indicators. Over time, a shift is being made so that the enrollment driven portion of the formula is changed to completion of credit hours rather than attempted credit hours. In 2010, 10% of enrollment funds will be based on completed credit hours; by 2014, all enrollment funding will be based on completed credit hours. In addition, institutions are awarded funds based on the following priorities: 1) increase federal research funding; 2) increase in degrees awarded; 3) increase in number of students graduating on time; 4) increase in students transferring from two- to four-year institutions; and 5) an incentive for Ivy Tech Community College and Vincennes University to provide non-credit workforce training courses.

Indiana is one of the few examples of how to use performance funding both to reward institutions as well as to prioritize budget cuts. In preparing budgets against lowered targets and in making mid-year reductions, schools with better performance measures than others saw smaller budget cuts. Those schools with higher per-student costs and lower completion rates were cut more severely than institutions performing better on those measures. (http://www.in.gov/che/files/1002decminutes.pdf)

Texas. Governor Rick Perry directed the Task Force on Higher Education Incentive Funding (established in 2008) to make recommendations on how to align student and institutional achievements with state and regional priorities. "Establishing an innovative incentive-based performance funding system is essential to furthering Texas' goals of having institutions of higher education prepare students for the demands and opportunities of the 21st century marketplace," said Governor Perry. In January 2009, a pilot project was established to award incentives to address important state priorities:

• \$40 million to be distributed based on the *annual* average number of degrees awarded at each institution during the three most recent fiscal years (FY2006, FY2007, and FY2008).

- \$40 million to be distributed based on the *increase* in the number of degrees awarded in the most recent two fiscal years (FY2007 and FY2008) compared to the two previous years (FY2005 and FY2006).
- \$40 million to be made available to the public two-year institutions to be distributed based on the average annual number of certificate recipients, associate's degree recipients, and students who transferred to a four-year or health-related institution in the three most recent fiscal years (FY2006, FY2007, and FY2008).
- \$185 million to be distributed to four-year institutions annually based on a combination of:
 - ◆ Productivity: Average number of total annual graduates.
 - Progress: Increases in the annual number of degrees awarded in the most recently available two-year period compared to the two previous years.
 - Quality: Average number of degree recipients in the three previous years (for example, FY2006, FY2007, and FY2008 for appropriations for FY2010 and FY2011) who achieved an acceptable score on a standardized exam during the 12-month period prior to their graduation, if an appropriate exam exists for the particular degree, as determined by the Texas Higher Education Coordinating Board (THECB), with the THECB to determine minimum scores for each exam.
- \$92.5 million to be distributed annually to two-year institutions based on a combination of:
 - Productivity: Average number of total annual certificate recipients, associate's degree recipients, and transfers to four-year or health-related institutions in the three previous years prior to the legislative session.
 - Progress: Increases in the annual number of transfers, certificates, and associate's degree recipients in the two most recent years compared to the two previous years.
 - Quality: Average number of certificates and associate's degree recipients in the three
 previous years (for example, FY2006, FY2007, and FY2008 for appropriations for FY2010
 and FY2011) who achieved an acceptable score on a standardized exam during the
 12-month period prior to their graduation.
 (http://www.thecb.state.tx.us)

2. Tuition.

Even before the recession, the nation and most states were struggling in their commitment to expand opportunities for students to enroll in and complete higher education, and college affordability had deteriorated substantially for most students and families. Tuition escalated as family income flattened, and costs and prices increased significantly even prior to the current recession. According to recent public opinion research, ¹⁴ the American public believes that college access is declining, that maintaining college opportunity and affordability is a crucial

issue, and that colleges and universities will drive up tuition and spending rather than seek more productive ways to utilize the resources they already have. Six out of 10 Americans now say that colleges today operate more like a business, focused more on the bottom line than on the educational experiences of students. Further, the number of people who feel this way has increased by five percentage points in the last year alone and is up by eight percentage points since 2007. Furthermore, six in 10 Americans agree that "colleges could take a lot more students without lowering quality or raising prices." Over half say that "colleges could spend less and still maintain a high quality of education." When probed about how colleges and universities should have used the ARRA (American Recovery and Reinvestment Act of 2009) funds, only 25% of Americans believe that most of the stimulus money should have gone to helping schools maintain their current operations, while 64% say that all or part of the money should have gone toward holding down tuition and fees.

The perception that a college education is out of reach for many qualified students was high during the recession years of the early 1990s, dropped in the years of economic boom, but climbed sharply as the recession intensified last year, and has reached its highest measured point in the most recent survey, with 69% of respondents saying that there are many qualified people who do not have access to higher education, up from 47% in 2000 and up by seven percentage points in the last two years. The results of this survey do suggest that the public may be becoming less receptive to the argument that is often made by college presidents—that their institutions need more resources if they are to continue their mission. Most of the public believe that colleges could spend less and still maintain quality. Whatever states do in establishing or setting future tuition policy should take into account the growing public sentiment that colleges become more productive and that students and families not shoulder greater burdens in paying for college expenses.

Today it is fair to say that the policy basis for public higher education tuition has completely eroded in most states. It has little, if anything, to do with how many educated people are needed in the states' present and future economy. Tuition policy in most states represents simply taking advantage of the opportunity to fill the gap between institutional funding requests and state allocations. Many states, in an effort to absolve themselves from the responsibility for steep tuition increases, have deregulated tuition to the institutional level, thereby guaranteeing tuition increases beyond growth in family income or inflation. If states want to be successful in educating more people, they must take responsibility for higher education affordability. Whether or not states have control over tuition policy, they do control the state budget, and tuition increases, as well as state financial aid, must be negotiated as one package in the financing of higher education.

Tuition Policies: Examples

Effective tuition policy influences student behavior in ways that affect educational productivity. If tuition is so high as to make student retention problematic, productivity will clearly suffer. Effective tuition policy requires creating: 1) affordable tuition levels, such as linking tuition increases to increases in family income; 2) refund policies that discourage students from dropping or adding courses; 3) policies that penalize students for enrolling for excessive credits in their programs; 4) rebates for students who take fewer than 120 state-sponsored credit hours to graduate; 5) tuition policies to encourage summer or weekend enrollments; and 6) circumstances in which policies set tuition so low that they yield insufficient funds to meet enrollment demand and encourage students to be cavalier about dropping courses.

3. State student financial aid.

State financial aid programs were designed primarily to assist low-income students in paying for college. A policy approach that seeks to improve productivity in the educational pipeline might focus on more targeted forms of student financial aid. Possibilities include:

- Avoiding making loans until students are in the last half of their academic programs to reduce the likelihood of students acquiring debt without gaining a credential;
- Providing increased financial aid for students who complete the entire transfer curriculum or earn an associate's degree before transferring to a four-year institution;
- Making the college preparatory curriculum for high school students a condition for financial aid;
- Ensuring priority for part-time adult students; and
- Making the state rather than institutions responsible for distributing financial aid awards (which ensures that aid is distributed according to state priorities).

Performance-Based Scholarships: Example

To understand the effects of supplemental financial aid with an incentive component to encourage academic success and persistence, two New Orleans-area colleges operated a performance-based scholarship program with counseling in 2004–2005. The Opening Doors program, targeted for low-income students, was administered by the Louisiana Department of Social Services and the Louisiana Workforce Commission. The colleges offered students \$1,000 for each of two semesters (\$2,000 total)—distributed in three separate payments each semester—if they met two conditions: they had to enroll in college at least half-time and they had to maintain an average grade of "C" or better. Students did not have to be welfare recipients, and the scholarships were paid in addition to federal Pell Grants. In a study of this program, compared to those in traditional college financial aid programs, students who received the scholarship were

not only more likely (by 5.3 percentage points) to register, they were more likely (by 6.4 percentage points) to register full-time, although only half-time enrollment was required to maintain the scholarship. Longer term analyses for the first groups of students who entered the Opening Doors study showed that program group students were more likely, by 6.5 percentage points, to be registered four semesters later. The program also showed positive effects on credit accumulation and grades through the fourth semester after students were given the scholarship. Finally, students themselves said they were more engaged in working toward their personal goals and reported higher levels of social support. (http://www.mdrc.org/project_publications_31_2.html)

States are also considering how their financial aid programs relate to students attending forprofit colleges and universities. If for-profit institutions can demonstrate quality programs, states may consider using this capacity in the future to increase certificate and degree attainment.

Minnesota State Aid to Students at For-Profit Institutions: Example

According to the Minnesota Office of Higher Education, a little more than \$20 million in state aid goes to 14,000 students to attend Minnesota's private for-profit schools each year. Most of the funds are from the Minnesota State Grant Program but other support is provided to students from other grant programs sponsored by the state. (http://www.house.leg.state.mn.us/hinfo/sessiondaily.asp?yearid=2007&storyid=1701)

States are also looking at how financial aid policies affect adult students working on certificate and degree programs. One of the most promising strategies for enrolling adults and encouraging them to finish their academic programs is making state financial aid available for part-time students. A number of states have made this revision to their need-based financial aid programs. Also, establishing mechanisms for adults to save for higher education is another strategy outlined below.

Lifelong Learning Accounts (LiLAs): Example

Lifelong learning accounts are a good way to provide support for adult students returning to higher education. LiLAs are employer-matched, portable, employee-owned accounts used to finance education and training. More states are beginning to develop LiLA legislation including California, Maine, Minnesota, Indiana, Kansas, Missouri, Iowa, and Washington. (www. lifelonglearningaccounts.org)

Finally, one of the most promising strategies for increasing the number of students who enroll and complete higher education is to merge the best aspects of merit-based financial aid along with need-based financial aid. Targeting financial aid dollars to middle- and low-income

families is an efficient use of public resources, but combining that with a merit program in junior and senior high schools to encourage students to take college preparatory classes provides strong incentives for both preparation and certificate and degree completion.

Indiana's Twenty-first Century Scholars Program: Example

Indiana's 21st Century Scholars Program began in 1990 as Indiana's way of raising the education aspirations of low- and moderate-income families. It is a program that is both well-targeted and raises the educational attainment of young people in Indiana. The program aims to ensure that all Indiana families can afford a college education for their children. Income eligible (low-income schools) 6th, 7th, and 8th graders who enroll in the program and fulfill a pledge of good citizenship are guaranteed the cost of four years of undergraduate college tuition at any participating public college or university in Indiana. If the student attends a private institution, the state will award an amount comparable to that of a public institution. If a student attends a participating school, the state will award a tuition scholarship equal to that of Ivy Tech Community College. Students in the scholarship program are rewarded for taking rigorous courses through Indiana's Core 40 program. Approximately 240,000 scholars are in the program and 60% are first-generation college students; 54% are from single-parent families, and most come from families with an average family income of \$25,842. Each year more eligible scholars are taking advantage of the program. (http://www.in.gov/ssaci/2345.htm)

4. Other finance policies.

a. Use of private colleges.

Some states have policies in place that make use of private colleges and universities to improve certificate and degree output by rewarding those institutions for the degrees they produce.

Financial Support for Private Colleges/Universities: Example

New York's Bundy Aid Program to Independent Colleges. For many years, New York has provided financial support to certain private colleges and universities based on degrees awarded at those institutions. The Bundy program is currently funded at \$45 million annually. Institutions receive \$600 for associate's degrees, \$1,500 for bachelor's degrees, \$950 for master's degrees, and \$4,500 for doctoral degrees. Providing funding to private institutions for awarding degrees rewards them for improving educational attainment in the state, without the state investing in new educational institutions. (http://www.highered.nysed.gov/oris/bundy)

b. Work colleges.

Seven private colleges in the United States have the designation of "work colleges." They operate on a very different financial model than most other private colleges; students work in exchange for low or no tuition. Work colleges have not yet been attempted in public higher education, but their promise in educating at-risk students warrants further attention. While this may not be a statewide solution for higher education finance, it may be a viable regional solution for specific campuses that meet student needs.

Work Colleges: Example

College of the Ozarks. The College of the Ozarks discourages student debt, since they serve mostly low-income and first-generation college students. As a full-time student, either in residence or as a commuter taking 12 or more hours, students work 15 hours each week at an assigned campus workstation. The student work program involves students in one of over 80 diverse work areas. Combined with scholarships and grants, their work scholarship covers most of their education, making the College of the Ozarks education affordable. Students find that their on-the-job experience gives them a significant competitive edge when beginning their career after college. The work program provides students with jobs in the Computer Center, Child Development Center, the campus museum, etc. Unlike the federal work-study program, the student work program lets the student contribute in significant ways, both educationally and to the betterment of the campus community. Furthermore, work colleges have lower administrative costs since students are working in so many positions across the campus. In addition to the 15 hours per week that students work during each semester, they work two 40hour weeks each year chosen from the weeks when classes are not in session. Students can also earn room and board by working six weeks per term during the summer break. Students at the College of the Ozarks are given grades for their work performance and increasing levels of responsibility as they progress through their undergraduate program. Officials at the college claim that retention and graduation rates are above average because students form a strong bond and commitment to the institution and their education through the work program. (http:// www.cofo.edu)

C. Accountability

States have worked to redesign their accountability systems during the past decade. Historically, accountability at the state level has for the most part monitored inputs, including dollars per student enrollment, percent of faculty with terminal degrees, books in the library, academic programs available to students, etc., to gauge the relative health of their higher education systems. While it is important to know the inputs available for higher education, increasingly state officials are beginning to monitor their "outputs," that is, degrees completed, student retention, progress in high-priority fields such as science, technology, engineering, and

mathematics (STEM), teacher education, etc. Unfortunately, the ultimate outcome of higher education—student learning as a result of certificate or degree program completion— is not regularly collected or reported on by most states. Accountability that focuses on outputs as determined by state and national priorities represents a "sea change" from accountability mechanisms that monitor institutional inputs.

A 2005 national task force chaired by Frank Keating (former Governor of Oklahoma) and Richard W. Riley (former Secretary of Education and former Governor of South Carolina) produced a report entitled *Accountability for Better Results: A National Imperative for Higher Education* that outlined some of the new dimensions of this accountability. Among their recommendations were: 1) create state data systems; 2) include the critical transition from high school to college as a focus of accountability measures; 3) invest in and improve teacher effectiveness; 4) develop accountability systems around broad state goals based on the educational needs of the population; 5) monitor results while reducing detailed controls/regulations; 6) coordinate state finance through appropriations, tuition, and financial aid to target priorities; and 7) achieve more effective institutional operations.

Designing state-based data systems to monitor student progress and completion is becoming a top priority for many states. However, even the most sophisticated state data systems have not yet been used to drive policy decisions. Public use of this data in simple, understandable terms is necessary for states to make informed policy decisions. Moreover, few states have strong links between their higher education databases and K–12 or the workforce. This investment is necessary if data systems are to become an important tool for monitoring and improving performance. Many states have, however, improved their data systems for higher education.

Accountability: Examples

Minnesota. Now in its third year, *Minnesota Measures* provides policymakers and educators with a statewide look at higher education effectiveness in the context of broad state objectives and national and international performance comparisons. The accountability report was developed in response to legislation passed in 2005 requiring the Minnesota Office of Higher Education to "develop and implement a process to measure and report on the effectiveness of postsecondary institutions in the state." The goals of the accountability initiative emerged from a process involving educators, policymakers, employers, and other leaders. The five goals around which specific measures are developed are: 1) improve success of all students, particularly students from groups traditionally underrepresented in higher education; 2) create a responsive system that produces graduates at all levels who meet the demands of the economy; 3) increase student learning and improve skill levels of students so they can compete effectively in the global marketplace; 4) contribute to the development of a state economy that is competitive in the global market through research, workforce training, and other appropriate means; and 5) provide access, affordability, and choice for all students. (www.ohe.state.mn.us)

Kentucky: Kentucky's annual accountability report to the public focuses on the progress from its strategic plan *Double the Numbers* (2007). Since the late 1990s, Kentucky has focused on answering five key questions: 1) Are more Kentuckians ready for post-secondary education? 2) Is Kentucky's postsecondary education affordable for its citizens? 3) Do more Kentuckians have certificates and degrees? 4) Are college graduates prepared for life and work in Kentucky? 5) Are Kentucky's people, communities, and economy benefitting? The annual accountability report answers each of these questions by using indicators for identifying results. The easy-to-read report is a good example of how state and institutional leaders are accountable for common goals. (http://cpe.ky.gov/info)

D. Regulatory Policies

A wide variety of regulatory policies affect the cost-effectiveness of institutional operations. Many policies were put in place to prevent "bad behavior" at a particular time in the past, but their costs are ongoing. Policies that regulate the following kinds of practices often fall into this category:

- Procurement practices that require an expensive process to acquire a cheap item;
- Excessively bureaucratic and lengthy hiring procedures; and
- Prohibitions against using seasonal workers to meet episodic workloads.

Institutions and state agencies should undertake a thorough policy audit that analyzes key regulatory policies and assesses their impact on implementing the various strategies for productivity enhancements, and asks those who are closest to the action to identify those policies and procedures that get in the way of productivity enhancements.

Regulatory Policies: Examples

1. Improve Productivity in the Educational Pipeline Supportive regulatory policies:

- Limit the number of state-sponsored credit hours required for a degree.
- Encourage, not discourage, the earning of credit through alternative means.
- Require program review and assessments of content alignment.
- Discourage large numbers of course drops and adds.
- Discourage students from taking the same course multiple times with the intent of improving their grade point average.
- Allow remedial work to be tailored to specific student shortcomings.

2. Redesign State/Campus Policies to Enhance Educational Productivity Supportive regulatory policies:

- Emphasize completion of a degree, not time-to-degree (to avoid penalizing part-time students).
- Make expectations about college readiness clear to students in grades 7 to 12, such as college placement exams in grades 11 or 12.
- Encourage institutions to deliver courses at times and places that meet student needs.
- Remove barriers to articulation and transfer, and instead offer such options as statewide transfer "guarantees" for the transfer curriculum, or joint admissions between community colleges and four-year institutions.

Counterproductive regulatory policies:

- Prohibit the combining of academic and vocational skills training.
- Require that all institutional credits be earned "in residence."
- Specify minimum classroom contact hours (that is, policies that value "seat time" over demonstration of learning).
- Specify the maximum number of credit hours that can be awarded on the basis of transfer, testing out, courses taken at remote sites, etc.

3. Use and Expand Facilities to Meet State Goals

Supportive regulatory policies:

- Constrain "mission creep" particularly in the expansion of graduate and research programs.
- · Eliminate overly protective service area designations, particularly if student demand is not met.
- Allow the emergence of nonpublic competitor institutions through program approval policies and financial aid policies.
- Encourage the emergence of institutions with alternative approaches to service delivery, particularly in high-demand fields.
- Encourage joint use of facilities.

The Virginia 2005 Restructuring Act

Virginia passed the 2005 Restructured Higher Education Financial and Administrative Operations Act that renegotiated the relationship between the Commonwealth of Virginia and its public colleges and universities. In what was described as "an evolutionary process," two parallel initiatives came together to create the Restructuring Act. The three most powerful public institutions in the state—the University of Virginia, the College of William and Mary, and Virginia Polytechnic Institute & State University—were advancing a proposal to become "chartered universities," a status that would give them more autonomy over daily operations and authority to establish tuition increases. At the same time, Governor Mark Warner was working with a group of Virginia leaders and higher education experts to develop an agenda to reform higher education in the state. The end result of this legislation that included every public college in the state and ensured that public institutions remained state agencies was that public colleges and universities are now eligible for three differentiated levels of increased autonomy, but not without first agreeing to meet a series of 11 specific performance goals that address state needs, such as access to higher education, collaborations with K-12, etc. The public colleges in Virginia gained more control to conduct certain operations, particularly financial and personnel procedures, but the state did not grant more freedom to of institutions to set tuition rates.¹⁵

E. Governance

Changing a state's governance arrangements for higher education should be a tool of last resort—to be attempted only if the intended effects are crucial for improvement and cannot be attained under the current governance structure. Having said this, it can be helpful if any state's governance mechanism:

- Places policy leadership for adult/workforce literacy in an agency that is also responsible for postsecondary education;
- Allows equal voice for the state's teaching institutions, beyond just the flagship institution(s); and
- Fosters cooperation among trustees and regents so that productivity and affordability become higher priorities, and institutions, states and the public can monitor progress toward these important goals.

Notes

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Patrick M. Callan is president of the National Center for Public Policy and Higher Education. He has previously served as executive director of the California Higher Education Policy Center, the California Postsecondary Education Commission, the Washington State Council for Postsecondary Education, and the Montana Commission on Postsecondary Education, and as vice president of the Education Commission of the States (ECS).

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Finney developed and directed the nation's first biennial state-by-state report card for higher education, Measuring Up and was principal author of the fifty state report cards published over a ten year period. She has worked with governors and legislators and has testified before congressional committees on higher education policy. Dr. Finney co-authored Public and Private Finance of Higher Education: Shaping Public Policy for the Future and Designing State Higher Education Systems for a New Century. She is currently co-authoring a forthcoming book, Financing Higher Education in an Era of Global Challenge. Dr. Finney has written articles and opinion pieces for AGB Reports (American Governing Boards), The Chronicle of Higher Education, State Government News, Spectrum (The Council of State Governments), Change: The Magazine for Higher Learning, and Education Week.

Dennis P. Jones is president of the National Center for Higher Education Management Systems (NCHEMS). He is widely recognized for his work in state and institutional approaches to budgeting and resource allocation; strategic planning; educational needs assessment; faculty workload and productivity; information for strategic decision-making; and the development of educational indicators. Jones has written many monographs and articles on these topics; has presented his work at many regional, national, and international conferences; and has consulted with hundreds of institutions and state higher education agencies on management issues. Prior to joining NCHEMS in 1969, Jones served as an administrator at Rensselaer Polytechnic Institute. He also received graduate and undergraduate degrees in engineering management from Rensselaer Polytechnic Institute.

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Although she currently works in policy analysis and research, she has a strong background and solid experience in student affairs and academic affairs administration at various

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Zis holds a Bachelor of Science in Management from SUNY-Binghamton, a Master of Education, and a Certificate of Advanced Graduate Study in Counseling and Student Personnel from Springfield College in Massachusetts. In June 2008, she completed her Education Specialist Degree in Educational Leadership and Policy Studies from Virginia Tech.

The National Center for Higher Education Management Systems

The National Center for Higher Education Management Systems (NCHEMS) is a private nonprofit organization whose mission is to assist colleges and universities as they improve their management capability. Through its more than 40 years of service to higher education, NCHEMS has been committed to bridging the gap between research and practice by placing the latest managerial concepts and tools in the hands of policymakers at the state and institutional levels. Since its founding, NCHEMS has received widespread acclaim for developing practical responses to the strategic issues facing leaders of higher education institutions and agencies. Established to meet the needs of working administrators and policymakers, NCHEMS delivers research-based expertise, practical experience, information, and a range of management tools that can help institutions and state education agencies improve both their efficiency and their 'Goal" of having a national higher education attainment rate of 60% by 2025. This initiative, designed to help create the higher education system our nation needs at a cost that students and taxpayers can afford, focuses on productivity: using resources more effectively to accomplish better results. The Lumina initiative aims to help states and institutions transform the delivery of postsecondary education to serve more students without sacrificing quality.

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The National Center for Public Policy and Higher Education

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