

P-16: Building a Cohesive Education System from Preschool through Postsecondary

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The history of public education in the United States has several defining moments in which economic, political, and cultural forces demanded a more diverse and better-informed student body. Prior to 1920, the United States was a predominantly agricultural society and the majority of the workforce toiled on farms. With the rise of urban culture and the increasing prevalence of industrialization in the 1920s, higher levels of education became essential to the new economy and political structure of the nation. By 1940, the number of fourteen to seventeen year olds attending high school increased to 70 percent, compared with the mere 10 percent who entered high school in 1900 (Hoffman and Snyder 2001).

The information age provides today's education system with yet another defining moment. No longer is a high school diploma a ticket to a high-paying job. Instead, receiving education beyond high school has become critical to finding economic security. A recent study by the U.S. Census Bureau confirms the relationship between education and income. For full-time

workers aged twenty-five to sixty-four, the average annual income for bachelor's degree-holders was \$52,200; the average annual income for associate degree-holders was \$38,200; and the average annual income for high school graduates was \$30,400 (Day and Newburger 2002).

The role of American education, however, is broader than simply producing students with the necessary skills and knowledge to get good jobs. It must also produce students who are prepared to take their place in society as active citizens. While volunteerism among young people currently is increasing, voting rates are down.¹ Here too, the role of postsecondary education is vital. "Data also confirm a link between educational attainment levels and levels of civic participation. In the 1996 presidential election, for example, college graduates ages twenty-five to forty-four were 70 percent more likely to vote than high school graduates in the same age group. High school dropouts were about 50 percent less likely to vote than high school graduates."²

¹ According to a 1998 study by Peter D. Hart Research Associates (1998), nearly 70 percent of young Americans are involved in activities such as volunteering, belonging to an organization, or helping to solve a community problem. Yet, this increase in volunteerism is not reflected in voting rates among young people. According to the Center for Information & Research on Civic Learning and Engagement (CIRCLE), "the electoral participation of Americans under the age of 25 has declined since 1972, when 18-to-21 year-olds were first permitted to vote" (Peter Levine and Mark Hugo Lopez, "Youth Voter Turnout has Declined, by Any Measure," September 2002, www.civicyouth.org, accessed December 10, 2002). The problem, according to Delli Carpini, is that "civic engagement has become defined as the one-on-one experience of working in a soup kitchen, clearing trash from a local river, or tutoring a child once a week. What is missing is an awareness of the connection between the individual, isolated problems these actions are intended to address and the larger world of public policy" (Delli Carpini and Keeter 1996).

² U.S. Department of Commerce, Bureau of the Census, *Current Population Reports, "Voting and Registration in the Election of November"* (various years), series P-20, Nos. 143, 440, and 504. (Originally published as the Voting Participation figure on p. 33 of the complete report.)

Despite the rising importance of going to college, today's education system operates as if postsecondary education is an option only for some students. As a result, 72 percent of high school graduates attend some form of postsecondary education, even though only 47 percent were prepared to do so.³ This lack of preparation is caused by an education system where three key sectors—preschool, K-12, and postsecondary—operate independently of each other and fail to properly communicate their mutual expectations regarding the knowledge and skills students must master. For instance, in almost every state, high school students must meet coursework requirements that are not connected to the requirements for college admission. In those states that require course alignment, the secondary and postsecondary sectors may find agreement in the *number* of math courses but not in the course title or content of these courses (Somerville and Yi 2002).

"P-16 education" attempts to address these disconnects by establishing an integrated system linking all levels of education from preschool through the achievement of a baccalaureate degree (grade "16"). Such an integrated system can provide all students with an opportunity to succeed in college. This article describes the basic tenets of a P-16 system with particular emphasis on the role of postsecondary education.

The Goals of P-16 Education

The ultimate goal of P-16 education is to provide every student with the skills and

knowledge they need to succeed as citizens and workers. Realizing this goal requires educators, policymakers, and administrators to think of education as *one system* of related, interdependent parts instead of as several isolated sectors. To establish such a cohesive, unified system, P-16 creates a series of benchmarks for all students to meet. Important benchmarks include, but are not limited to:

- **Early Learning: Children enter kindergarten ready to learn.**

Research continues to confirm that entering kindergarten "ready to learn" has two important components: readiness in children—which includes physical, social, and emotional well-being, as well as cognitive readiness—and school readiness—which includes each school's ability to support the learning and development of young children (Rainwater and Van de Water 2001; Juel 1988).

- **Grade 1: All students are reading at or above grade level by the end of first grade.**

Research demonstrates that students who are not reading on grade level by the end of first grade are unlikely to be reading on grade level by the end of third grade (Juel 1988).

- **Grade 3: All students read at or above grade level by the end of third grade.**

For third grade students who are not reading at grade level, the chances of graduating from high school are slim (Slavin, Karweit, and Wasik 1993).

- **Grade 8: All students have taken**

- **algebra I by the end of eighth grade.**

Math achievement in the eighth grade clears the way for students to take advanced classes in high school. In 1996, however, only 25 percent of U.S. eighth graders were enrolled in algebra classes.

- **Grade 12: All students graduate from high school prepared for postsecondary education or work.**

Workforce needs are shifting. "Jobs today require more education. In 1959, 20% of workers needed some college; in 2000, 56% do" (Carnevale and Fry 2000).

- **Grades 12-13: High school exit exams test students at the twelfth grade level and are aligned with college admissions requirements.**

Alignment of standards, curriculum, and assessment continues to be weak and confusing for students and their families. Tests are based on weak standards, are not aligned to state standards, and are not supported by adequate curriculum (American Federation of Teachers 2001).

- **Grade 13: All students enter postsecondary education prepared for college-level work and do not need to take remedial coursework.**

Students who are not adequately prepared in high school face remedial coursework in college, and students who take more than one remedial education course (including a math or reading course) are less likely to complete their postsecondary education than students who place into college-level work in their first semester (National Center for Education Statistics 2000).

³ NELS:88, Second (1992) and Third (1994) Follow up; in USDOE, National Center Education Statistics, *Condition of Education 1997, Supplemental Table 9-1*.

- Grades 14-16: Every student who enters a postsecondary program finishes that program.** “In only half of the states do more than 50% of first-year students at community colleges return for their second year.” In addition, even in states with higher than average college completion rates, only 70 percent of students complete their degree at a baccalaureate degree-granting college or university within six years of enrolling (National Center for Public Policy and Higher Education 2002).

The Progress of P-16 in the States

Postsecondary educators and institutions, K-12 systems, and early learning systems need to partner with their communities, districts, and state education leaders to help ease student transitions at the critical benchmarks identified above. In many states, this work has already begun. While the movement is still in its formative stage, policymakers and educators in twenty-six states have experimented with a variety of approaches to implementing a P-16 system.

Most states seeking to create a connected system of education do so by building on the current system using a continuum of incremental approaches. Incremental approaches build a P-16 system piece-by-piece, gaining support for one area before moving on to the next. An example of this incremental approach can be found in Oregon with the Proficiency-based Admissions Standards System (PASS) system. Developed by the

Oregon University System, PASS works to align university admissions standards with the state’s K-12 school improvement plan, which is based on grades and demonstrated student competencies. In the PASS system, students must demonstrate proficiency in math, English, science, foreign languages, social sciences, and visual

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and performing arts (Oregon University System 2000).

Although most states choose the incremental approach, some states have chosen a more radical, comprehensive path to achieving a P-16 system. Such states seek to simultaneously address governance, finance, standards, assessments, admissions, and program changes at all levels. The most notable example of this approach is Georgia, where former Governor Zell Miller created a P-16 Initiative in 1995. Key long-term goals of this initiative include:

- Improve achievement of students at all levels of education
- Help students transition easily from one level of education to the next
- Ensure that all students who enter postsecondary education are “college-ready”
- Improve the graduation rates of students in postsecondary programs
- Help students become more active and responsible citizens⁴

Current Governor Roy Barnes renewed and expanded Georgia’s P-16 initiative in 2000 with the passage of the A Plus Education Reform Act of 2000 (HB 1187) in which the Education Coordinating Council was created. The bill provides a statutory base to Georgia’s P-16 work and requires the executive state officers—pre-school through postsecondary—and the governor to meet quarterly to discuss the state’s P-16 goals, work, and progress.⁵

The Role of Postsecondary Education in Creating a P-16 System

Each sector of the education system has an important part to play in ensuring students have the tools they need to succeed as they progress from grade to grade. As the endpoint of the education pipeline, the postsecondary sector’s role in creating smooth transitions for students is especially crucial. Some activities that postsecondary institutions can undertake to help create a P-16 education system include:

- Research developmentally appropriate learning environments for young children.** Children who participate in

⁴ State of Georgia P-16 Initiative, www.usg.edu/p16, accessed December 10, 2002.

⁵ State of Georgia, Education Coordinating Council home page, www.state.ga.us/ecc, accessed December 10, 2002.

early learning education programs are more likely to attend postsecondary education (Jacobson 1999).⁶

Institutions of higher learning can do research to determine what children, particularly preschool children, need to know and be able to do on a cognitive level when they enter kindergarten (Rainwater and Van de Water 2001).

- **Align high school exit, college entrance, and course placement exams.** Students perform better when they know what is expected of them. Higher education needs to make expectations clear and work cooperatively with the preschool and K-12 sectors to imbed these expectations in state standards and curricula (Rainwater and Van de Water 2001).
- **Improve college preparatory programs to increase college completion.** Although research shows that taking the right courses in high school is the single greatest predictor of college success (Adelman 1999), educators, administrators, and policymakers need to ask and answer other questions related to why students persist with and complete their college education. For example, why do some students drop out of college? Is it an issue of affordability? Are students simply not prepared to study at the college level?
- **Phase out remedial education.** Colleges and universities can work

with K-12 schools to ensure students are prepared for postsecondary coursework before students ever set foot on campus. Increasing the number of college-level courses and providing extra support for struggling students should be a requirement of all K-12 curriculums (Rainwater and Van de Water 2001).

- **Upgrade teacher preparation and professional development.** Today's education students are tomorrow's teachers and early education professionals. Professors and education students need to connect with K-12 schools and early childhood education providers in an effort to raise student achievement across all levels. Higher student achievement in the early learning and K-12 system is contingent upon the higher education system producing quality teachers (Rainwater and Van de Water 2001).
- **Share academic performance data.** Higher education can work to create needed data systems that track students across education levels and provide a feedback loop to high schools on student performance. Such systems will help pinpoint where students have problems and when they need extra assistance (Rainwater and Van de Water 2001).
- **Build counseling capacity at the high school level.** College preparation goes beyond offering a high-level college prep curricula to all students.

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⁶ This article refers to the findings of the Abecedarian Project. More information regarding the study can be accessed online at www.circ.uab.edu/slides/csrameyc.pdf.

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Students need to know not only what courses to take and when to take them, but how and where to apply to the postsecondary institution of their choice. This is especially true for children from low-income backgrounds, whose parents often have little or no experience with applying to college. Higher education can work to ensure that future guidance counselors are properly trained to help all students navigate their path to postsecondary success.

Conclusion

An increasingly complex world economy and the health of our country's democracy demand an education system where the vast majority of students successfully complete education beyond the secondary level. To achieve this goal, each education sector—preschool, K-12, and postsecondary—must learn to view itself as part of one integrated, coherent system. P-16 education offers a framework for accomplishing this task. A P-16 education system builds lines of communication between each sector so that preschoolers are properly prepared to enter kindergarten, high school graduates are properly equipped to succeed in college, and college graduates are prepared to take their place in society. Standing at the endpoint of the education pipeline, the postsecondary sector's role in building an effective P-16 framework is especially important. With active leadership provided by postsecondary institutions, P-16 education reform can help our country's education system meet its primary purpose of providing every student with the tools they need to be active and productive citizens. ■

Selected National Resources on School-College Alignment

Achieve, Inc.

This independent, bipartisan, nonprofit organization helps states raise academic standards, measure performance against those standards, establish clear accountability for results and strengthen public confidence in our education system.

www.achieve.org

The American Diploma Project

A partnership of four leading national education organizations and five states, this project is working to guarantee that American high school graduates will have the knowledge and skills they need for success after graduation: in college, the workplace, or the armed forces.

www.americandiplomaproject.org

The Bridge Project: Strengthening K-16 Transition Policies

This project of the Stanford Institute on Higher Education Research is formulating both short- and long-term policy and practice recommendations that will help educational institutions and federal, state, and local agencies to strengthen the alignment between higher education admissions-related requirements and K-12 curriculum frameworks, standards, and assessments.

www.stanford.edu/group/bridgeproject

The Early College High School Initiative

Over five years, beginning in fall 2002, this national initiative is creating seventy pioneering small high schools

where students will earn both a high school diploma and two years of college credit toward a bachelor's degree.

www.earlycolleges.org

The Education Commission of the States

As a nonprofit, nonpartisan organization involving key leaders from all levels of the education system, this interstate compact seeks to improve public education by facilitating the exchange of information, ideas, and experiences among state policymakers and education leaders.

www.ecs.org

The Education Trust

This nonprofit organization works for the high academic achievement of all students at all levels, kindergarten through college. In addition to access, the work of the Trust encompasses K-16, standards, teacher quality, state and federal policies, and community engagement.

www.edtrust.org

Standards for Success

After hosting a series of National Conversations and analyzing educational standards and assessments, Standards for Success is creating a tool for K-12 staff to help students develop the skills necessary to be successful in their first year of college.

www.s4s.org

