

Building Multiple Pathways: Approaches, Relevant Programs and Implementation Considerations

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I. Introduction

The need to dramatically increase the number of young people who gain the credentials and skills necessary to succeed in 21st century America has never been clearer. One of the most promising ideas for achieving this goal is to establish multiple pathways for learners that lead to a variety of high-quality postsecondary options. The multiple pathways idea suggests that relying almost exclusively on one established educational route—a traditional high school experience followed by either college or work—is inherently limited. The premise underlying current calls for multiple pathways is that communities would be able to meet the learning needs of more students if they were to offer youth a wider variety of learning options, options that could take place in schools, colleges, community organizations, and workplaces. As a result, more students would stay in educational settings longer, learn more, and be better prepared for further education, careers, and citizenship.

The Problem: Underserved, Unprepared Youth

A large body of work details the need to improve educational outcomes for American youth.¹ The data include comparisons of the performance of U.S. youth with those of other industrialized countries, and reports from higher education institutions and employers regarding the preparedness of high school graduates for future work and education.² Alarming statistics regarding the students least well-served by current schooling arrangements lend particular importance to the multiple pathways debate.

Various estimates have placed the national graduation rate as low as 68%. For the 2002/03 school year, the National Center for Education Statistics calculated the rate at 73.9%.³ High school students from families with income in the bottom 20% dropped out of school at six times the rate of those from higher brackets.⁴ One in seven students who earn a high school certificate do so by passing the five GED examinations.⁵ For minority group students, the dropout statistics are particularly bleak. African-American students have little more than a 50% chance of graduating, Native Americans 51% and Latinos

¹ Prominent examples include *A Nation at Risk* (1983), *America's Choice: High Skills or Low Wages!* (1990), and *Tough Choices or Tough Times* (2007).

² Cavanagh, S. (2007). "US Falls Short in Math and Science" *Education Week*. December 4; Conley, D. *College Knowledge: What It Really Takes For Students to Succeed and What We Can Do To Get Them Ready*. (2005). San Francisco, CA: Jossey-Bass; The Conference Board, et al. *Are They Really Ready to Work?* (2006). NY: Author.

³ Seastrom, M., et al. (2005). *The averaged freshman graduation rate for public high schools from the Common Core of Data: School years 2001-03*. Washington, DC: US Department of Education, National Center for Education Statistics.

⁴ National Center for Education Statistics. *The condition of education 2004* (U.S. Department of Education)

⁵ National Center for Education Statistics. *Dropout Rates in the United States* (U.S. Department of Education, Office of Educational Research and Improvement Research Report No. NCES 2002-114); U.S. Department of Commerce, Bureau of the Census, *Current Population Survey*, October (1972 – 2000) (as cited in the NCES report).

53%.⁶ In actual numbers, 3.8 million 18 to 24-year olds are not in school or employed. This constitutes 15% of all young adults. Between 2000-2004, 700,000 young adults joined this group of disconnected youth.⁷ Clearly, these students are not being prepared for and connected to opportunities for continued education and/or employment.

Multiple Pathways

There has been a great deal of interest nationally in defining, investigating and implementing multiple pathways approaches. The United States Department of Labor has launched a Multiple Educational Pathways to Graduation Initiative that provides opportunities for seven mid-sized cities to develop systematic strategies to address the needs of struggling students and dropouts. New York City has created an Office of Multiple Pathways to focus on these needs. *Education Week* recently published a special issue on college and career readiness and several articles on multiple pathways.⁸ Jobs for the Future (JFF) has also published a report and a book on the topic, and a group of California scholars has written numerous papers advocating for a multiple pathways approach in California.⁹ Finally, the recent high-profile report of the New Commission on the Skills of the American Workforce, *Tough Choices or Tough Times*, encourages rethinking current educational arrangements while making the case for two pathways, which will be discussed further in this paper.

The multiple pathways concept takes different forms in current proposals and initiatives. In many cases, the idea is geared specifically to the needs of the most disadvantaged students. In others, the thrust is on all students. Some proponents focus on more choices in schools while others advocate expanding the role of other types of organizations (e.g., community, higher education and workplace) in supporting learning in non-school settings.

Multiple pathways proponents also differ in the content and skills they emphasize. Some are more concerned about academic basics. Others make the case for integration of occupational skills, higher order thinking and soft skills. And in many cases, participants in the multiple pathways debate approach the topic from different vantage points. *Tough Choices or Tough Times* argues for preparing students for 21st century work and economic competitiveness. Youth development organizations, on the other hand, while agreeing on the importance of career preparation, stress the importance of helping young people make the transition to adulthood by connecting them with caring adults,

⁶ Orfield, G., et al. (2004). *Losing our future: How minority youth are being left behind by the graduation rate crisis*. Cambridge, MA: The Civil Rights Project at Harvard University.

⁷ Annie E. Casey Foundation (2004). *Kids count data book*. Baltimore, MD: Author.

⁸ Olson, L. (2007). "What Does 'Ready' Mean?" *Education Week*. Vol. 46, Issue 40. June 12.

⁹ Steinberg, A. and Almedia, C. 2002. *From the Margins to the Mainstream: Effective Learning Environments for Urban Youth*, Boston, MA: U.S. Jobs For the Future; Kazis, R., et al. (2004). *Double the Numbers: Increasing Postsecondary Credentials for Underrepresented Youth*. Cambridge, MA: Harvard Education Press. See <http://www.idea.gseis.ucla.edu/publications/mp/index.html> for the *Multiple Perspectives on Multiple Pathways* papers.

bolstering positive peer interaction and community engagement, and creating safe, healthy environments with clear expectations and boundaries.

Three Questions

This report is organized around three questions.

- What can we learn from current notions of multiple pathways to inform the development of a multiple pathways initiative?
- What can we learn from programs and services that support youth development and education?
- How can cities, states and the federal government support multiple pathway approaches?

II. The Multiple Pathways Idea: Three Approaches

Three overlapping approaches to creating multiple pathways pose pertinent questions for communities that are considering designing a pathways initiative.

The first approach, “High Standards, Defined Pathways” is represented by two prominent voices in American education: the New Commission on the Skills of the American Workforce (and its staff director, Marc Tucker), and Robert Schwartz, academic dean of the Harvard Graduate School of Education and former president of Achieve.¹⁰

The New Commission report, *Tough Choices or Tough Times*, recommends a set of 10 fundamental reforms to the American educational system, ranging from the ways teachers are employed and paid, to school governance, to universal early childhood education. The first recommendation and central proposal is, “Assume we will do the job right the first time.” According to the New Commission, the “first step” is for states to create board qualifying examinations – syllabus-based exams of core subjects that assess achievement rather than aptitude. Most students would take the exams at the end of 10th grade, but could elect to take them earlier. They could also take the exams multiple times.

Upon passing the exams, students would proceed to one of two *pathways*,¹¹ determined by one of two passing scores. Students who attain the first passing score would go

¹⁰ National Center on Education and the Economy. New Commission on the Skills of the American Workforce. (2007). *Tough Choices or Tough Times: The Report of the New Commission on the Skills of the American Workforce*. San Francisco, CA: Jossey-Bass; Schwartz, R. (2004). “Multiple Pathways—and How to Get There,” in Kazis, R., et al. (2004). *Double the Numbers: Increasing Postsecondary Credentials for Underrepresented Youth*. Cambridge, MA: Harvard Education Press.

¹¹ The New Commission does not use the term “multiple pathways.”

directly to community or technical college. Designated institutions would be required to admit them without remediation. Students who achieve the second passing would have the option of continuing in a demanding academic upper-secondary program, such as suggested by Advanced Placement and International Baccalaureate courses.

The New Commission's sixth recommendation fleshes out the curriculum and assessment implications of the use of high stakes board qualifying exams. With reference to the standards and assessments of other countries whose students do well on international tests, the New Commission makes the case that most states have not established coherent standards, relying on unwieldy committees that produce amalgams of different lists rather than a unified set of standards. Further, the assessments created by assessment companies are often characterized by significant shortcomings.

- They do not require extensive writing.
- They do not require multistep solutions in math.
- They do not require “clear thinking, good analysis and skillful problem solving.”
- They do not result in high quality work samples that states share with upcoming students as exemplars.¹²

To determine what the new exams should assess, the New Commission proposes that states and national organizations undertake a careful analysis of what today's workplaces require of students. The exams should include 21st century skills such as creativity, generating multiple possible solutions, and leadership and team skills. Finally, the New Commission points out that such exams will cost substantially more than existing ones and that states will, therefore, have to budget accordingly.

Robert Schwartz has proposed a different version of the “High Standards, Defined Choices” approach.¹³ He proposes that states design exit assessments around the American Diploma Project (ADP) benchmarks in reading, writing and math as high school graduation standards. The ADP benchmarks—based on an analysis of entry-level expectations of higher education institutions and high-performance employers—are considered more rigorous and focused than many state standards. Schwartz recommends that states limit their exit exams to reading, writing and math, but adds they could “assure rigor and quality control” by developing “medium stakes” end-of-course tests that would count as a fixed percentage of a student's final grade.

Although all students need to pass the state exit exams, Schwartz proposes the following pathways as alternatives to the traditional high school-to-college route to prepare students for the exams, and to provide continued learning and work opportunities after graduation:

¹² National Center on Education and the Economy. New Commission on the Skills of the American Workforce. (2007). *Tough Choices or Tough Times: The Report of the New Commission on the Skills of the American Workforce*. San Francisco, CA: Jossey-Bass.

¹³ Schwartz, R. (2004). “Multiple Pathways—and How to Get There,” in Kazis, R., et al. (2004). *Double the Numbers: Increasing Postsecondary Credentials for Underrepresented Youth*. Cambridge, MA: Harvard Education Press.

- a blended institutions pathway modeled on early college and dual enrollment programs,
- a “2+2” model based on Tech Prep programs that leads to a technical credential,
- a work-based model (employer or union led) in which learning takes place primarily in workplaces, and
- a service model that includes military service and AmeriCorps service.¹⁴

Schwartz makes the point that these models already exist; he argues that they be financed so that more students can participate in them.

One of his key concerns is that his approach be consistent with the innovative restructuring of high schools, particularly with the small schools movement. Schwartz notes that the efforts of many new small schools to create a wider range of learning opportunities (e.g., work-based learning experiences with partner employers) have been inhibited by state standards and assessments. He maintains that by limiting high-stakes exit exams to reading, writing and math, states could allow all schools flexibility in creating engaging learning environments.

The New Commission’s and Schwartz’s proposals differ in important respects: the number of required exams, when they are administered, how many pathways (two versus five), and how students are routed into pathways (exam performance versus choice). They share a common emphasis, however, on requiring all students to meet some version of high standards and in creating a limited number of defined pathways.

Jeannie Oakes and other California scholars developed a second approach to multiple pathways in a project at UCLA called “Multiple Perspectives on Multiple Pathways.”¹⁵ Oakes and her colleague, Marissa Saunders, have written two papers outlining their model¹⁶ which has been favorably assessed by a number of other scholars as a way to improve education in California. This model takes a theme-based schools and career pathways approach. The goal of the “Theme-based Small Schools” approach is to create more options for students and to tie formal education to “work, community, and citizenship.” Themes can include career-related areas such as health, law and information technology as well as non-occupational themes like the environment, social justice or the performing arts. Oakes and Saunders emphasize integrating academic and

¹⁴ Ibid., pg. 25.

¹⁵ See <http://www.idea.gseis.ucla.edu/publications/mp/index.html> for the *Multiple Perspectives on Multiple Pathways* papers.

¹⁶ Oakes, J. and Saunders, M. (2007a). “Reforming California’s High Schools: College Prep for All? Reinvigorated Career and Technical Education? Or Multiple Pathways to Both?” in *Multiple Perspectives on Multiple Pathways: Preparing California’s Youth for College, Career, and Civic Responsibility* (<http://www.idea.gseis.ucla.edu/publications/mp/index.html>). Los Angeles, CA: UCLA/IDEA Publication Series; Oakes, J. and Saunders, M. (2007b). “Multiple Pathways: High School Reform that Promises to Prepare All Students for College, Career, and Civic Responsibility,” in *Multiple Perspectives on Multiple Pathways: Preparing California’s Youth for College, Career, and Civic Responsibility* (<http://www.idea.gseis.ucla.edu/publications/mp/index.html>). Los Angeles, CA: UCLA/IDEA Publication Series.

vocational education. They propose the following components for each theme-based pathway:

- a college preparatory academic core,
- a professional/technical core based on academic and real world standards, and
- field-based learning opportunities.

In a second paper, they elaborate on these components, outlining the following “core features” of their vision of multiple pathways:

- new structure,
- integrated curriculum,
- new instruction,
- student choice based on interests, and
- new assumptions about student capacity (e.g., all students can master challenging academic and technical material).

By new structures, Oakes and Saunders refer to specific reforms.

- Develop a wider range of learning sites (e.g., small schools, college campuses and off-campus work-based learning sites).
- Restructure coursework (i.e., team teaching and longer blocks of time).
- Create flexible time and support systems to ensure that all students can meet challenging standards.

They propose curriculum integration that focuses on academic-vocational integration and applied learning using career themes. Finally, they envision instruction that emphasizes “cooperation, team problem-solving, communication, decision-making, commitment, confidence, and boldness in developing ideas and approaches.”¹⁷

Oakes and Saunders link the idea of a portfolio of theme-based schools (an interest of Schwartz's as well) with the strategy of integrating academic and vocational education and career academies and career majors. By creating a varied set of small schools with different orientations for students to choose from, the California incarnation of multiple pathways creates more options for students by creating schools that use progressive educational strategies and instructional approaches.

Like the California model and Schwartz's approach, the third model also emphasizes creating more small schools and programs to give students a variety of options. However, it places less emphasis on career and technical education and more on creating alternative settings, particularly for the most at-risk students. The National Youth Employment Coalition and the American Youth Policy Forum, among others, have published reports describing this concept, and New York City has created an Office of

¹⁷ Ibid.

Multiple Pathways to implement many components of this model. Although this approach, which we call “Alternative Schools and Programs,” is usually associated with at-risk youth, there is no reason to think it cannot also be applied to other student populations with good results.

“Alternative Schools and Programs,” suggests that communities should include so-called “alternative” or “transfer” schools specifically designed for students who are not succeeding in traditional environments. It also suggests supplementing traditional and alternative schools with a variety of additional learning options, including GED programs, community college programs (diploma granting, GED and skill-based), vocational skill programs, and improved afterschool programs. Community organizations should play a large role in creating alternative learning environments, including alternative schools, afterschool programs, GED programs, and programs that build vocational skills without granting diplomas.¹⁸ By including pathways to prepare young people for employment even if they haven’t met challenging academic standards, this approach creates options the other two do not.

All three approaches are based on the idea that today’s traditional high school is not meeting the needs of many students. The New Commission would require all students to meet a 10th grade bar, then send some directly to community college while others remain in rigorous upper-secondary programs. Schwartz proposes requiring students to pass challenging 12th grade exit exams in reading, writing and math, but allow them to prepare for the exams in work and service settings. He also supports high school/college blends like early college and tech prep programs that smooth the transition from high school to college. The California model described by Oakes and Saunders and colleagues focuses on high school reform, marrying the small schools movement with academic-vocational integration and progressive pedagogy. Finally, the alternative pathways model supports creating tailored school settings and a broad program range for at-risk students to support them in earning diplomas or GEDs, as well as programs that prepare students for meaningful employment directly.

Perhaps the biggest underlying difference among the three multiple pathways iterations—one that is an important concern for would-be pathways designers—revolves around issues regarding *what students should learn, what constitutes rigor, and how rigor can be ensured*. This raises practical issues about the order and pace of instruction, or scope and sequence, and are part of an ongoing national debate that provides a context for the three multiple pathways conceptions.

Katie Haycock of the Education Trust is on one side of the larger debate. She argues that the only way to ensure equity is to provide all students with a rigorous standard high

¹⁸ Steinberg, A. and Almedia, C.. 2002. *From the Margins to the Mainstream: Effective Learning Environments for Urban Youth*, Boston, MA: U.S. Jobs For the Future; Thakur, M. and Henry, K. (2005). *Financing Alternative Education Pathways: Profiles and Policy 2005*, Washington, DC. U.S. National Youth Employment Coalition.

school curriculum defined by specific sequences of courses.¹⁹ The New Commission is probably closest to this end of the spectrum because it would require all students to pass exams in a variety of subjects.

Jeannie Oakes and Norton Grubb, participants in the UCLA-based multiple pathways project, recently published a paper criticizing both the New Commission and the ADP Benchmarks. They argue that the standards envisioned by the New Commission and the ADP Benchmarks represent a narrow definition of rigor, one that neglects higher order thinking skills, application of knowledge and academic depth in favor of breadth. According to Oakes and Grubb, any gains from increased expectations come “at the expense of equity, curriculum relevance, and student interest.” Much of their argument is focused on high school exit exams, which they say are stuck between not being challenging enough and being so challenging that large numbers of students cannot pass them. They contend that exit exams promote narrowly defined curriculum and a test-driven focus on basic skills, which may increase dropout rates or make them less equitable, as well as push additional costs onto school systems.²⁰

As an alternative, Oakes and Grubb propose a redefinition of "rigor" that includes

- higher order thinking skills, creativity and innovation,
- application and transfer of learning,
- breadth of competencies necessary for participation in adult roles and inspired by the ideal of a well-rounded individual.

They envision a system of “distributed rigor” in which well-trained teachers, school leaders, districts, employers, community-based organizations, college admission requirements, and diagnostic state assessments all play a role in ensuring adequate rigor.

The debate between the Education Trust, the New Commission, and the ADP, on one hand, and Oakes and Grubb on the other, is further informed by four additional perspectives. First is the notion of “the new basic skills” promoted by Harvard professors Richard Murnane and Frank Levy.²¹ In 1996, Murnane and Levy suggested that college is not the only route to the middle class. When many employers hire college graduates, they are looking for assurance that these employees have the following basic skills:

¹⁹ Barth, P. and Haycock, K. (2004). “A Core Curriculum for All Students,” in Kazis, R. (2004). *Double the Numbers: Increasing Postsecondary Credentials for Underrepresented Youth*. Cambridge, MA: Harvard Education Press.

²⁰ Grubb, N. and Oakes, J. (2007). *‘Restoring Value’ to the High School Diploma: The Rhetoric and Practice of Higher Standards*. Tempe, AZ and Boulder, CO: Education Policy Research Unit.

²¹ Murnane, R. and Levy, F. (1996). *Teaching the New Basic Skills: Principles for Educating Children to Thrive in a Changing Economy*. New York, NY: The Free Press.

- ability to read at the ninth grade level or higher,
- ability to do math at the ninth grade level or higher,
- ability to solve semi-structured problems where hypotheses must be formed and tested,
- ability to work in groups with persons of various backgrounds,
- ability to communicate effectively orally and in writing, and
- ability to use personal computers to carry out simple tasks like word processing.²²

Murnane and Levy maintain that schools should prepare students for successful employment by doing a better job ensuring that high school graduates have these skills.

David Conley's work on college readiness offers a second perspective.²³ Conley and his colleagues have completed an extensive analysis of what students need in order to succeed in college. Conley's research suggests that high schools need to focus on coherence and depth more than breadth. In addition to self monitoring and study skills and knowledge about the norms, behaviors, and processes of college admission and college life, Conley argues for the importance of habits of mind and key academic content (it is interesting to consider whether the specific competencies Conley associates with college readiness might be worthy goals for all students). By habits of mind, Conley is referring to the following capacities (based on feedback from college professors and analysis of the academic work of college freshmen):

- intellectual openness,
- inquisitiveness,
- analysis,
- reasoning, argumentation and proof,
- interpretation,
- precision and accuracy, and
- problem solving.

His notion of key academic content focuses on the core skills of writing, research, reading comprehension, interpretation, and evaluating evidence. He emphasizes the big ideas of social studies and the sciences and a thorough understanding of the "basic concepts, principles, and techniques" of algebra. Conley's habits of mind and key academic content is similar to the higher order thinking the Education Trust, the New Commission, ADP, and Oakes and Grubb advocate, although Conley elaborates the specific qualities of thinking skills in greater detail.

The Partnership for 21st Century Learning, a coalition of employers and education institutions, reinforces the emphasis on higher order skills. It argues for a combination of skills that includes *thinking skills, soft skills, and information technology literacy* in

²² Ibid.

²³ Conley, D. (2005) *College Knowledge: What It Really Takes For Students to Succeed and What We Can Do To Get Them Ready*. San Francisco, CA: Jossey-Bass.

addition to mastery of core subjects. The Partnership's outline of these skills is a useful reference (see Appendix 1).

Finally, research on career and technical education suggests that occupational courses may help reduce dropout rates, but that students who take too many occupational courses have lower college attendance rates. Sociologists De Luca and Planck suggest creating an “optimal balance” of one occupational course for every two academic courses to reduce dropout rates without limiting college-going.²⁴ As a variation on this theme, the economist John Bishop suggests students take a sequence of four occupational courses to boost earnings and as a safety measure in case college does not work out.

Taken together, the three conceptions of multiple pathways and the four additional perspectives on core knowledge and skills we have discussed suggest questions that help frame the issues any multiple pathways initiative needs to address.

1. Is there a core body of knowledge and skills all students need to know and be able to do? If so, what does it include? Should it emphasize breadth or depth? To what extent does it encompass higher order thinking skills, career and technical education, soft skills, business literacy, and/or information technology skills? Likewise, what is “rigor,” and how can it be ensured?
2. What are the implications of the multiple pathways approach for reforming high schools, and by extension, postsecondary education and training? Are small schools, career academies, other theme-based schools, alternative schools, and high school/college blends part of the solution? What are the implications for curriculum, instruction, assessment, and credentialing?
3. What additional programs and services should communities provide to support students in preparing for postsecondary education, work and citizenship (e.g., GED programs, afterschool programs, skills training, etc.)? What is the role of community organizations, employers and unions in providing support services and creating pathways outside of schools and/or colleges that may lead to meaningful credentials and/or employment? How might these services and programs be funded?

III. Multiple Pathways Programs and Services: Six Options

In this section, we review programmatic options that are likely to be considered in any comprehensive multiple pathways initiative. We look at four high school reforms: small learning communities, small schools (general population), small schools (alternatives for disconnected youth), and high school/college blends. We also examine two kinds of programs that serve students outside of school systems. These six options serve as potential building blocks that can be combined in multiple ways to create additional learning options and supports for students.

²⁴ Cited in Olson, L. (2007). “What Does ‘Ready’ Mean?” *Education Week*. Vol. 46, Issue 40. June 12.

Small Learning Communities (SLCs). This model requires the least modification to current practice. SLCs typically operate under the same authority as the traditional high school. Diplomas are issued by the Local Education Agency/high school once students have completed the requisite “work.” The latter can be traditional course completion/Carnegie credits or less traditional approaches such as competency completion measured by a variety of tools. Standardized tests may or may not be used.

SLCs are typically organized differently from the traditional high school in staff allocation, student scheduling, and extended learning opportunities outside the school walls. Funding does not vary significantly from the typical high school formula. SLCs often include a combination of practices.

- Administrators and counselors teach at least one class, reducing student-teacher ratios.
- Teachers advise students and communicate extensively with parents.
- Many teachers have dual certification in order to facilitate interdisciplinary teaching and learning, and teams of teachers plan and develop curriculum together.
- Core teachers team with elective teachers to integrate arts and vocational skills and increase student engagement.
- Students make interest-based choices including honors/Advanced Placement/International Baccalaureate courses offered at program/class level with no remedial courses (instruction is flexible and tailored).
- Extra support is provided in the context of regular classroom instruction.²⁵

The *Talent Development model* developed by Johns Hopkins University is one example of dividing large high schools into smaller units. MDRC has found that the “Ninth Grade Success Academy” component of the Talent Development Comprehensive School Redesign model shows strong results from practices designed to improve students’ skills in the first six months of 9th grade.”²⁶

Career academies began 35 years ago. Over the past decade they have become an important option for some school districts interested in restructuring large high schools into small learning communities, and creating pathways between high school, postsecondary education and the workplace.

It is estimated that 2,000 high schools across the country are currently using the career academy approach. Career Academies operate as schools within schools and typically enroll 30 to 60 students per grade. They are organized around themes like health, business and finance, and computer technology.²⁷”

²⁵ See: www.topschools.com/StartUpFAQ.htm

²⁶ Schorr, L. and Marchand, V. June 2007. *Pathway to Successful Young Adulthood*, Washington DC: Harvard University.

²⁷ Schorr, L. and Marchand, V..June 2007. *Pathway to Successful Young Adulthood* , Washington DC: Harvard University.

Small Schools. This report divides small schools, which usually serve 150 to 400 students, into two categories: those designed to meet the needs of the general high school population and those designed for disconnected youth. Both may operate under varied authorities—the school district, a satellite to the school district, or a state charter. They are typically more autonomous than SLCs and often have different funding formulas, given their autonomy and separate physical space.

Small schools tend to emphasize depth over breadth in the curriculum and nontraditional methods of assessment, such as portfolios, demonstrations and teacher-made assessments. Historically, this has sometimes led to disputes with state and local education authorities about what should be taught and tested (and even how). A consortium of New York City small schools, for example, took the New York State Board of Regents to court and won a temporary waiver from having students take the State Regents examinations.

The University Park Campus School on Clark University's campus in Worcester, Massachusetts is an example of a small school designed for students in grades 7-12. Since it opened in 1997, over 95% of its graduates have attended college. Nearly all are first generation college attendees and over 99% have passed the Massachusetts Comprehensive Assessment Test.²⁸ A strong academic program and demanding yet nurturing culture have enabled the school to achieve outstanding results without significant attrition. The school and its innovative partnership with Clark University have been recognized as a national school reform model.

Small Alternative Schools. Diploma Plus is an example of a small school model designed for disconnected youth. It serves approximately 2,500 students in 20 schools, including five in New York City. Three more Diploma Plus programs are expected to open by September 2008. Diploma Plus features core classes that emphasize the mastery of essential skills and content through applied learning. Students start at the Presentation Level, working on academic assignments and projects. When they meet the standards and have defended a portfolio of their best work, they are promoted to the Plus Phase, which includes college courses, internships, small group seminars, and a community service project.

In a 2003-04 survey, 63% of Diploma Plus students reported they attended school almost every day compared to 43% of students in their former school. Additionally, 43% of DP students reported they always completed their work compared to just 16% of students in their former school. Three out of five (59%) obtained their diploma, and nearly four-fifths of 2004 graduates said *they planned to attend college*.²⁹

As with small schools, alternative small schools often face challenges in terms of federal and state regulations. New York City Public Schools' Office of Multiple Pathways has led the way in organizing small schools, using alternative assessments to meet state requirements. The Office has also reached an agreement with the Board of Regents to

²⁸ See: www.upcsinstitute.org

²⁹ Brigham Nahas Research Associates. (2005). *Diploma Plus Evaluation*, Waltham, MA: U.S.

allow transfer schools to give students four years to graduate from the time they enter the transfer school rather than when they started at a traditional high school.³⁰

High School/College Blends. Blends differ from other models because they combine high school and college curriculum and assessment requirements to a larger degree. They also integrate high school and college resources, including teachers and faculty, and may also have different relationships with community organizations.

Any community interested in incorporating a blend like the early college model should consider policies to (1) allow college courses to count toward high school credit (sometimes referred to as dual enrollment); (2) base eligibility for courses on readiness in the *particular subject*; (3) ease transfer of credits toward a two-year and four-year degree; (4) make teacher certification more flexible, including allowing college faculty to teach “high school” students; (5) merge secondary and postsecondary funding streams, and; (6) give schools autonomy over hiring, curriculum and budget.³¹

Portland Community College’s *Gateway to College*³² program in Oregon is a collaborative effort with the public schools and an example of a blend that offers students the opportunity to complete high school while earning college credit. By participating in YouthBuild, Oregon students also have the option of earning a high school diploma or GED while learning skills in the building trades. Oregon residents have a legal right to a publicly-funded education until they receive a high school diploma or reach age 21.

The Portland example, and other high school/college blends, is significant. If high school is no longer the end goal, the key issue becomes the best way to help young people transition to postsecondary education and training. Portland’s college blend programs allow students to earn a GED instead of a high school diploma and go on to a variety of postsecondary options.

Other states, like North Carolina, for example, encourage high school/college blends through legislation and policy. North Carolina’s *First in America Innovative Education Initiatives Act* in 2003 authorizes community colleges and other postsecondary institutions to establish blends to help disconnected youth earn degrees more quickly.³³

Many states also use dual enrollment as a key strategy to help engage high school students who have run out of challenging options as well as to increase the number of students earning college credentials to improve their success in the labor market. Maine and Virginia have been particularly aggressive in this respect. Under the Great Schools Partnership, Maine’s Early College Program serves first generation disengaged youth. In

³⁰ Bill and Melinda Gates website, Alternative High School Initiative.

³¹ Hoffman, N. and Vargas, J. (2005). *Integrating Grades 9 through 14*, Boston, MA: U.S. Jobs for the Future.

³² See: www.ahsi.info.

³³ “Innovative Education Initiatives Act.” North Carolina General Statutes, Chapter 116C sec. 116C-4. Session Law 2003-277.

Virginia, 20% of seniors take at least one dual enrollment course as part of a revamped senior year.³⁴

Ensuring that all young people have access to postsecondary education/training, including and beyond the traditional K-12 system, is fertile territory for the multiple pathways approach. The City University of New York's *College Now* program is unique because it operates in a state without dual enrollment legislation. This may provide important lessons for local communities/school districts that want to partner with comprehensive public higher education institutions on a large scale. College Now is designed to increase the number of high school graduates prepared to go on to higher education without remediation. In all, 14,170 New York City Public School students are in College Now, and 32.4% of the students who entered City University in the fall of 2003 had College Now experience.³⁵

GED/Adult Basic Education. Programs in this category are generally not tied to the K-12 requirements, including high stakes testing and other teaching and learning requirements. Rather, students and programs work toward some combination of: (1) passing the five sections of the General Education Development examination and earning a certificate; (2) entering postsecondary education/training; and (3) preparing for and obtaining a job.

As the number of students who drop out of high school or graduate without the necessary skills to succeed in postsecondary education/training and careers increases, so does the number of those who need services outside the K-12 system.

Research shows that students who earn a General Education Development certificate (GED) and a postsecondary credential earn more in the labor market. The number of young people earning a high school credential by earning a GED has risen steadily (one in seven students).³⁶

Based on this information, Commonwealth Corporation, a quasi-state organization in Boston, Massachusetts dedicated to developing the current and future workforce, introduced a prototype called "GED Plus." The United States Department of Labor later adopted the generic term GED Plus and encourages communities to implement models that combine the GED with postsecondary education and training.

The Adult Career Development Center (ACDC), established in Richmond, Virginia in 1970 under the auspices of the Richmond Public Schools, is an example of a GED/Adult Basic Education program. It serves Richmond residents ages 16 and over who are dropouts, at risk of dropping out, economically disadvantaged, or unemployed. ACDC's

³⁴ Hoffman, N. (2005). *Add and Subtract: Dual Enrollment as a State Strategy to Increase Postsecondary Success for Underrepresented Students*, Boston, MA: U.S. Jobs for the Future.

³⁵ Ibid.

³⁶ National Center for Education Statistics, *Dropout Rates in the United States* (U.S. Department of Education, Office Educational Research and Improvement Research Report No. NCES 2002-114); U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (1972 – 2000), as cited in the NCES report).

services include family literacy, English for speakers of other languages, high school completion, adult basic education, GED preparation, on-site GED testing, vocational education, and support services like parenting classes.³⁷

Any multiple pathways initiative must address the transitional needs of those who are graduating from high school as well as those who have dropped out and might earn a GED. Community colleges and other postsecondary programs may bridge the gap for students who have not earned a high school diploma or are in need of transitional assistance.

Some employers report they prefer to hire young people who have had hands-on training and have developed technical skills they can use in the workplace. Community colleges have become key players in the effort to ensure that young people are educated and prepared for employment. Many community colleges enroll young people who have not earned the credits required for high school graduation, enabling them to complete the coursework required to receive their diplomas and gain experience and skills needed for employment.

Experiential/Work-Based. This strategy is applicable to young people who have left traditional high school and want to earn a high school diploma or GED, as well as those who have a credential and seek to enhance their skills and career pathway. During the 1990's, many traditional high schools experimented with this approach under the School-to-Work Opportunities Act. This strategy is not used as often today.

Regardless of where this strategy is implemented, it has the following elements:

- applied and active learning often beyond school/program walls,
- nontraditional means of assessment, and
- connecting activities, including a continuum of work-based experiences beginning with exposure to and extending into full and part-time employment.

The first three programs profiled in this report—Los Angeles Conservation Corps, YouthBuild, and the Manchester Craftsman Guild—serve youth seeking to earn a high school credential. Year Up, on the other hand, serves youth who have already earned a credential and seek entry into a technical career. City Year also serves those who have earned a high school credential and offers service opportunities that may lead to a career.

The Los Angeles Conservation Corps (LACC) engages youth ages 13-23 in education, job training and community service programs. Established in 1996, the Adult Corps High School serves youth ages 18-23 who work as corps members for LACC. Corps members split their time equally between the classroom where students study core

³⁷ Thakur, M. and Henry, K. (2005). *Financing Alternative Education Pathways: Profiles and Policy*, Washington, D.C.: National Youth Employment Coalition.

subjects like math, reading and writing, and the field where crews work on community service projects. Those without a high school diploma enroll in LACC's charter school.³⁸

YouthBuild links vocational and academic education, leadership development and community service to help young adults rebuild their communities and transform their lives. Undereducated and unemployed young people ages 16-24 work towards earning a GED or high school diploma while simultaneously learning construction skills by building affordable housing for homeless and low-income people. They participate in a variety of leadership development experiences (e.g., decision-making affecting policies in their school).

Schools in YouthBuild's National Schools Initiative incorporate active inquiry teaching methods to help students link new information to personal experience, learn by working and solving problems on projects, and satisfying performance-based assessments—including national construction trades testing and certification. These schools work to develop students' academic, technical, personal, and critical thinking skills to meet the standards required for success in both higher education and today's job market. They help students develop a sense of leadership responsibility toward active citizenship.

There are currently 26 diploma-granting alternative and charter schools in the YouthBuild network. During the past five years, an average of 91.8% of students entered the program without a high school diploma; 30% had been in the criminal justice system; and over a quarter were on public assistance. Research on YouthBuild graduates indicates that more than 75.7% went on to college or are employed, earning more than \$9 per hour.³⁹

Manchester Craftsman's Guild in Pittsburgh helps young people pursue the arts while strengthening their academic, technical and employability skills (Jobs for the Future, 2002). The Manchester Craftsmen's Guild was established in 1968 to help combat the effects of economic and social devastation experienced by the youth of an inner city Pittsburgh neighborhood. The program's key strategy used art to help change the course of young people's lives and inspire community change. Located in a residential row house, Manchester Craftsmen's Guild initially offered informal ceramics classes and a small exhibition space.

The program expanded to address the interests of community members and gained the notice of Pittsburgh's civic leaders. Because of its demonstrated success, it eventually assumed the leadership of Bidwell Training Center, a vocational education program serving mostly displaced steel workers from the same community.

In 1986, the program opened a 62,000 square foot arts and career training center. It currently provides youth training in fields as varied as gourmet food preparation, chemical, office and medical technologies, and education programs in ceramics,

³⁸ Schorr, L. and Marchand, V. June 2007. *Pathway to Successful Young Adulthood*, Washington DC: Harvard University.

³⁹ See: www.ahsi.info.

photography and digital imaging. In addition, the center presents nationally acclaimed jazz performances, and its own jazz recording label has produced four Grammy-winning CDs out of five nominated for the award.⁴⁰

Year Up is a program for young people in Boston who have completed high school but are struggling to find a career. Created in 1995, Year Up is expanding to other cities. It combines classroom instruction with corporate internships, and has an impressive track record of placing its graduates in well-paid technical positions. Through its partnership with Cambridge College, Year Up also prepares its participants for postsecondary education.⁴¹

City Year, which is part of AmeriCorps, enlists young adults ages 17 to 24 in a demanding year of full-time service. Youth work in teams to address societal needs, particularly in schools and neighborhoods. The teams are diverse racially, ethnically and by class and education. More than 1,100 corps members serve at 16 City Year sites across the United States.⁴²

Jobs Corps, a free education and vocational training program, is administered by the United States Department of Education. There are 126 sites in the 50 states, the District of Columbia, and Puerto Rico. Typically residential, it helps young people ages 16 through 24 get a better job and gain important life skills. Job Corps students learn a trade, earn a high school diploma or GED, and get help finding a job. They are paid a monthly allowance; the longer they stay with the program, the higher their allowance. Job Corps also provides career counseling and transition support to students for up to 12 months after they graduate from the program.⁴³

Residential Programs. There are many types of residential programs in the United States. Residential schools and programs for students aged 14-25 serve

- males or females,
- particular racial groups,
- individuals with physical and emotional disabilities,
- individuals addicted to drugs or alcohol,
- homeless and delinquent youth,
- youth of particular religious persuasions,
- gifted and talented youth,
- those interested in particular themes like ecology and wilderness survival
- those interested in specific occupations, including some based on college campuses

⁴⁰ See: www.manchesterguild.org/indexflash.htm.

⁴¹ Steinberg, A. and Almedia, C. (2002). *From the Margins to the Mainstream: Effective Learning Environments for Urban Youth*. Boston, MA: Jobs For the Future.

⁴² Schorr, L. and Marchand, V. (2007). *Pathway to Successful Young Adulthood*. Washington, DC: Harvard University.

⁴³ See www.jobcorps.dol.gov

Wrap-Around Services. The term wrap-around services is used broadly in the field of human services to describe multiple services provided to individual clients in an integrated and holistic fashion. Typically, wrap-around services are managed by a professional to ensure that the client receives integrated services rather than having to “shop” across multiple vendors.

Wrap-around services in education typically imply that students receive social/emotional and career services in addition to academics at their school or at another location. Services are delivered in an integrated and managed fashion, often by a school counselor or similar professional.

Some examples of wrap-around services programs include

- *The Beacon model.* Created in New York City in 1991 by the New York City Youth Bureau, community-based organizations are awarded grants to create school-based community centers that offer a wide range of services, including homework and tutorial assistance, literacy programs, preventive services, Adult GED, English as a Second Language and computer courses, recreational activities, cultural activities, arts and crafts, theatre, and dance. Individual programs differ depending on the characteristics of the provider agencies and the cultural and socioeconomic needs of the community. Many have health clinics and employment programs; others encourage family participation, arts and recreation. The New York City Department of Youth and Community Development awards each Beacon program \$400,000 per year and provides \$50,000 per year to the NYC Board of Education for the use of space at each school site.⁴⁴
- *The Harlem Children’s Zone, Inc.* Established in 1970, HCZ, formerly Rheedlen, was the first non-profit organization in New York City to focus exclusively on the problem of truancy among young people, „issues related to foster care and the need for afterschool activities. After 1977, HCZ started organizing block associations to go door-to-door in a specified geographic area. Using schools as a community resource, HCZ has developed a network of school-based prevention programs in Central Harlem, the Upper West Side and the Hell’s Kitchen area. These programs offer an array of services that keep young people in school while enhancing their intellectual, social and emotional development. In 1997, HCZ launched a multi-year comprehensive community building initiative designed to revitalize a 24-block neighborhood in Central Harlem. The approach encompasses housing, community organizing, employment, technology, early childhood, public safety, public schools, community parks and playgrounds, afterschool and summer programs for young people, food programs for the young and elderly, and emergency food and clothing for their clients.⁴⁵

Community schools is another model for delivering wrap-around services. A community school is both a locale and a set of partnerships between the school and other community

⁴⁴ See: www.AYPF.org

⁴⁵ See: www.HCZ.org

resources. Its goal is to establish an integrated focus on academics, health and social services, youth and community development, and community engagement that leads to improved student learning, stronger families and healthier communities. Schools become centers of the community and are open to everyone, every day, and evenings and weekends.

Community schools use public schools as hubs, bringing together many partners to offer a range of supports and opportunities for children, youth, families, and communities. Partners work to help children be prepared to learn when they enter school and every day thereafter; prepare young people for adult roles in the workplace, and as parents and citizens; make families and neighborhoods safe, supportive and engaged; and keep parents and community members involved with the school and lifelong learning.

Because community schools address many of the challenges today's schools and educators face, they are key to an analysis of the need and feasibility of building multiple pathways to address the following issues:

- cultural disconnects,
- disengaged students,
- poverty,
- too much unstructured time,
- unaddressed health needs,
- transience,
- school violence and unsafe school environments, and
- overburdened and under resourced schools.

Community schools strive to enlist youth, families and community residents to work as equal partners with schools and other community institutions to develop programs and services in five areas.

- Quality education—high caliber curriculum and instruction enable all children to meet challenging academic standards. The school uses all of the community's assets as resources for learning and involves students in contributing to the solution of community problems.
- Youth development—young people develop their assets and talents, form positive relationships with peers and adults, and serve as resources to their communities.
- Family support—family resource centers, early childhood development programs, coordinated health, mental health and social services, counseling, and other supports enhance family life by building upon individuals' strengths and skills.
- Family and community engagement—family members and other residents actively participate in designing, supporting, monitoring, and advocating for quality programs and activities in the school and community.

- Community development—all participants focus on strengthening local leadership, social networks, economic viability, and the physical infrastructure of the surrounding community.⁴⁶

Residential programs and wrap-around services can be combined with any of the other programmatic options. For this reason we do not include them in the following table summarizing important features of the first six programmatic options.

Table 1.

Category	Exemplars
<p>Small Learning Communities (SLCs)</p> <ul style="list-style-type: none"> • Break large high schools into smaller units within existing buildings based on themes such as social justice or specific occupations • Typically strive to increase rigor, relationships and relevance by establishing more intimate connections 	<p>Talent Development High School (national)</p> <p>Career Academies (national)</p>
<p>Small Schools (general population)</p> <ul style="list-style-type: none"> • More autonomous than SLCs • Standalone buildings or separate schools within larger buildings 	<p>University Park Campus School (Worcester, Mass.)</p>
<p>Alternative Small Schools</p> <ul style="list-style-type: none"> • Cater to students who have left the K-12 system or transferred from a more traditional high school where they did not succeed • Many students have fallen one or more years behind their graduating class and are statistically at risk of dropping out • Tend to place greater emphasis on youth development principles and provide more “wraparound”—or social support—services than other small schools 	<p>Diploma Plus (national)</p>
<p>High School/College Blends</p>	<p>Gates Foundation’s Early College</p>

⁴⁶ See: www.communityschools.org

<ul style="list-style-type: none"> • Blur the line between high school and postsecondary education and training • Students earn a significant number of college credits while still in the program with the goal of earning a two-year or four-year college degree 	<p>High Schools (national)</p> <p>Middle College High School at LaGuardia</p> <p>Community College (Queens, New York)</p> <p>College and Career Transition Initiative (national)</p> <p>Tech Prep (national)</p> <p>Gateway to College Program (national)</p>
<p>GED/Adult Basic Education</p> <ul style="list-style-type: none"> • Help students ages 16 and older, no longer in traditional high school, improve their academic and career skills, earn a high school diploma or GED, and transition into postsecondary education/training and work 	<p>Adult Career Development Center (Richmond, Va.)</p> <p>GED Plus (generic design adopted by the U.S. Labor Department)</p>
<p>Experiential/Work-Based</p> <ul style="list-style-type: none"> • Emphasize applied learning and youth development strategies • Typically operates outside the traditional K-12 system • The first three examples help young people earn high school diplomas or GEDs and explore and develop skills in specific occupations while the last two generally serve youth who have already earned a high school credential and are interested in developing specific career/technical skills or pursue service that might lead to a career • An occupationally focused program that helps students ages 16 and older, no longer in traditional high school, earn GED or in some cases, a high school diploma 	<p>Los Angeles Conservation Corps</p> <p>YouthBuild (national)</p> <p>Manchester Craftsman Guild (Pittsburgh)</p> <p>Jobs Corps (national)</p> <p>Year-Up (national)</p> <p>City Year (Boston)</p>

IV. The Role of Government Institutions and Policy: Key Considerations

Implementing an ambitious multiple pathways strategy requires a mix of favorable local, state and federal conditions. The development of multiple pathways takes place at the community level where different programs and services come together to create alternatives for youth. State and federal policies have a strong influence on what is possible at the community level. This section highlights key policy issues at the community, state and federal levels, leading to further study as a project moves into the next phase, particularly a study of best practices.

Community Coordination and Infrastructure

Youth services in most communities are fragmented, making it difficult for youth and families to figure out which door to knock on for help. Yet a consensus has emerged among experts in the field that improving outcomes for high-risk youth requires action across programs, policies, disciplines, and systems. Bringing community programs and services together in a coordinated, comprehensive way has great potential to significantly reduce risk factors and strengthen protective efforts.

Based on its 2002 review of nontraditional programs for at-risk youth, Jobs for the Future recommended that communities create infrastructures to support portfolios of educational opportunities—in and outside of schools. In his book, *It Takes a City*, Paul Hill suggests one mechanism for creating such infrastructures. Hill proposes that communities establish Community Education Boards to function as new community authorities that oversee and align a system that enlists all of a community's resources, not just schools, to ensure that children's needs are met to help them progress toward a productive adulthood. Hill envisions the Community Education Board as broadly representative, including elected or mayorally appointed public members and ex officio representatives of community institutions (e.g., the United Way, major private charities, foundations dedicated to education and cultural affairs, public libraries and museums, independent schools, and faith-based/community-based organizations).

Financing such a system would require blending funding streams, including public school funds and local public social service monies for children's programs. The Community

Education Board would oversee the equitable use of education funds. It would also control public human service funds, allocating them according to local priorities, and license organizations to receive them on the basis of match and quality of services.

Therefore, the feasibility of establishing such a Board—or an alternative means of ensuring adequate coordination of community resources—is an important question that must be addressed when planning a multiple pathways project.

State Policy Support

A hospitable state environment is an important consideration when investigating potential implementation sites for a multiple pathways initiative. Rhode Island is currently implementing nontraditional ways of assessing student work and New Hampshire is in the process of eliminating Carnegie Units.

Indiana is an example of a state that has taken action that may facilitate the development of multiple pathways in local communities. In 2006, Indiana passed legislation requiring schools to identify and provide support services to students at risk of dropping out. Specifically, the law requires that districts report the number of 9th graders who do not have enough credits to be promoted to 10th grade, and advise them of how to “recover” credits and improve their skills. A second provision offers individuals 19 years of age, including those without a high school diploma, a “fast-track” to earn a high school diploma and to transition into college.⁴⁷

The National Youth Employment Coalition has identified the following range of policy mechanisms necessary to support multiple pathways:

- Enact a state statute to establish a state program or deliberate mechanism allowing funding to follow “at-risk” students to alternative education settings (established under Oregon law, 1985).
- Allow school districts to award credit based on proficiency and competency (the Oregon State Board of Education approved this in 2002).
- Designate Charter Schools as a Local Education Agency (e.g., High Tech High School, CA).
- Establish multiple charter granting authorities, some of which are outside of the traditional K-12 system (e.g., in Milwaukee, the area technical college, the city and the University of Wisconsin can issue charters).⁴⁸

⁴⁷ Indiana 114th General Assembly. (2006). House Enrolled Act. No 1347. A Bill to Amend the Indiana Code concerning Education.

⁴⁸ Thakur, M. and Henry, K. (2005). *Financing Alternative Education Pathways: Profiles and Policy*, Washington, D.C. U.S.: National Youth Employment Coalition.

Federal Policy Support

There are a host of potential barriers at the federal level. They include mandates under No Child Left Behind's Adequate Yearly Progress to track student progress toward graduation based on four-year cohorts; not recognizing college faculty as "highly qualified" to teach high school students who participate in high school/college mixes; lack of uniformity around "dual enrollment"; and the continuing disconnect between high school graduation and college entrance requirements.

The Center for Law and Social Policy and the National Youth Employment Coalition have issued a set of recommendations to make NCLB and related federal legislation more attuned with the needs of disconnected youth (see Appendix). In addition, the *Graduation Promise Act of 2007*, proposed by a host of national organizations including Jobs for the Future, contains multiple elements that may have a positive impact, including the following:

- Expand the provider requirement for Supplemental Education Services to include entities able to provide services to students in an applied learning setting or format.
- Ensure that plans designed by local education agencies make youth who have left school prematurely a priority for outreach.
- Allow states to incorporate opportunities to attain a secondary school diploma/GED in plans for multiple pathways and expanded educational options.
- Develop state sustainable funding formulas to support multiple pathways and expanded educational options.
- Provide competitive grants to school development organizations, youth development intermediaries, districts, and or states to support replication of proven models for improving achievement and increasing graduation rates for students who are not on track to earn a diploma.

V. Concluding Questions

Multiple pathways proponents have developed three main approaches to the concept. One uses examinations to insure that students reach a high academic bar while allowing them to pursue different paths in order to reach this bar (Schwartz) or after reaching it (the New Commission). The second approach creates a variety of small schools, using themes to diversify options and create connections to occupational learning. The third pushes for alternative small schools and alternative programs—in and outside of schools—to meet the needs of at-risk youth.

Translating any of these approaches into practice requires designing specific programmatic options for youth. In section II, we reviewed six relevant programmatic options: small learning communities, small schools (general population), small

alternative schools, high school/college blends, GED/adult basic education, and experiential/work-based education.

Implementing a multiple pathways initiative requires crafting an approach and coordinating a variety of programs across multiple sectors, which will require some sort of community infrastructure like a community education board, to allocate resources and ensure coordination and accountability.

This review of programmatic options for multiple pathways and related policy considerations brings us back to the questions raised at the end of Section II. We re-state these questions here and add two additional sets of questions (numbers 4 and 5) based on the discussion in Sections III and IV. We suggest that these questions can serve as a useful organizing framework for a potential multiple pathways project.

Organizing Questions for a Multiple Pathways Initiative

1. **Foundational content and skills.** Is there a core body of knowledge and skills all students need to know and be able to do? If so, what does it include? Should it emphasize breadth or depth? To what extent does it encompass higher order thinking skills, career and technical education, soft skills, business literacy, and/or information technology skills? Likewise, what is “rigor,” and how can it be ensured?
2. **Implications for schools.** What are the implications of the multiple pathways approach for reforming high schools and postsecondary education and training? Are small schools, career academies, other theme-based schools, alternative schools, and high school/college blends part of the solution? What are the implications for curriculum, instruction and assessment?
3. **Implications for other organizations and programs.** What additional programs and services should communities provide to support students in preparing for postsecondary education, work and citizenship (e.g., GED programs, afterschool programs, skills training, etc.)? What is the role of community organizations, employers, and unions in providing support services and creating pathways outside of school and/or college that may lead to meaningful credentials and/or employment? How might these services and programs be funded?
4. **Community capacity and governance structures.** What conditions should a community have in place to be considered a good candidate for a multiple pathways initiative? Which mechanisms would a potential implementation site use to allocate resources across various organizations, coordinate programs and ensure accountability throughout the system?
5. **State and federal conditions.** Which state context is likely to be most supportive of a multiple pathways initiative? How does local implementation interact with state policy and federal mandates and what are the possible ramifications for implementing a multiple pathways approach?

Appendices

- 1. The Partnership for 21st Century Skills Framework for 21st Century Learning.*
- 2. Recommendations from the National Youth Employment Coalition and the Center for Law and Social Policy on Disconnected Youth—September 11, 2007.*

Appendix 1: The Partnership for 21st Century Skills Framework for 21st Century Learning.

- Core Subjects and 21st Century Themes

- Learning and Innovation Skills
 - ◆ Creativity and Innovation Skills
 - ◆ Critical Thinking and Problem Solving Skills
 - ◆ Communication and Collaboration Skills

- Information, Media and Technology Skills
 - ◆ Information Literacy
 - ◆ Media Literacy
 - ◆ ICT Literacy

- Life and Career Skills
 - ◆ Flexibility & Adaptability
 - ◆ Initiative & Self-Direction
 - ◆ Social & Cross-Cultural Skills
 - ◆ Productivity & Accountability
 - ◆ Leadership & Responsibility

Appendix 2: Recommendations from the National Youth Employment Coalition and the Center for Law and Social Policy on Disconnected Youth—September 11, 2007

MULTIPLE PATHWAYS TO GRADUATION

Essential components of an education pathway for this population include

- **Credentials.** Awarding education credentials and including multiple pathways to a credential that includes a high school diploma and/or its equivalent.
- **Credits.** Awarding credit based on proficiency and competency.
- **Learning approach.** Offering competency-based and applied-learning approaches
- **Performance indicators.** Employing relevant performance indicators for student achievement and programs and schools. These should be integrated into a larger framework of common measures shared by the workforce investment and public education systems.
- **Progress and interim measures.** Using measures that consider student progress over time and relative gains.
- **Collaboration.** Collaborating with partners, including but not limited to education systems/programs, community-based organizations, community colleges, and businesses/business coalitions.
- **Elements of effective practice.** Including characteristics and elements that encourage students to stay in an education program or school.
- **Support services.** Requiring the provision of family and community support services to students.
- **Connection to workforce development and career preparation.** Including work based learning, career preparation, internships, and other opportunities to help prepare youth for paid employment in the 21st century workplace.

Thus, we recommend the following:

- Fund the implementation of dropout prevention and recovery programs that apply principles of effective practice to their model.
- Elevate reform of high schools within NCLB with designated resources to be accessed by states and targeted to districts with greatest need, and to support the implementation of multiple pathways to high school graduation.
- Promote the creation of smaller supported learning environments; opportunities for contextual learning; and opportunities for work and career exposure.
- Require states and districts applying for such resources to specify the role employers will play to ensure the curriculum is relevant; the instructional materials and equipment are state of the art; competencies are being imparted and documented; and youth have access to a wide array of internship, work-study, work-experience, and career-exposure opportunities.
- Require states to develop content standards, assessments and teacher-quality standards that are aligned with postsecondary and industry standards.
- Promote dual and concurrent enrollment programs for secondary-postsecondary credentialing as a vehicle to accelerate learning while gaining technical and occupational

skills, and as a vehicle for reconnecting out-of-school youth to a positive educational pathway.

- Assist states and districts with the development of competency-based methods of imparting and documenting the achievement of critical skills required for graduation and labor market success.
- Assist states and districts with the implementation of robust integrated data management and accountability systems, so that student progress—in terms of credit accumulation, mastery of competencies, graduation, and postsecondary matriculation—can be monitored regardless of the pathway or educational vendor.

DROPOUT PREVENTION AND RECOVERY

Across the country, there are strong examples of innovative approaches that are yielding significant improvements in student achievement, keeping youth in school, or re-engaging them in education. Examples include extended-day programs, smaller learning communities and dual-enrollment programs. In addition, many schools are responding, achieving success by colocating wraparound health and social services in the school in order to provide additional supports to students and families to facilitate their academic success. Because there is no “one size fits all” approach to education, school systems need to evaluate the student population and provide an array of opportunities to meet student needs. The School Dropout Prevention Act, authorized under NCLB, is substantially under funded and provides only for the implementation of school-wide activities that would promote better retention. The general language of the legislation does not direct funds to effective interventions that address the academic needs of disconnected and at-risk youth. For example, the legislation allows funds to be spent on such things as “reduction in pupil-to-teacher ratios” and “professional development.” Both are necessary to improve public schools, but they do not address the particular academic needs of at-risk and disconnected youth or the infrastructure serving them. Greater specificity is needed to ensure the funds are used to implement effective practice for preventing dropout and recovering former students.

Therefore, we recommend the following:

- Target federal and state funding of dropout prevention activities to students at greatest risk of leaving school prematurely by providing activities and services demonstrated to decrease dropout rates.
- Allow community-based organizations, workforce development providers and institutions of higher education with a proven track record of working with struggling students and dropouts to receive funds under No Child Left Behind to provide these students with educational services and support that will lead to a high school diploma or equivalent credential.
- Broaden the set of activities eligible for expenditure of supplemental education services funds to include activities that address the broader set of barriers contributing to student failure at the high school level.
- Expand dropout prevention efforts to include services and programs in middle schools that feed into high schools with low graduation rates.
- Require dropout prevention funding to be expended on subgroups within the school population that have a higher likelihood of dropping out, not just on school-wide

activities. Focus dropout prevention funding on activities and services shown to decrease dropout rates for students, including: extended-day programs; summer enrichment/knowledge retention programs; individualized tutoring; mentoring; wraparound social services located within the school; civic participation opportunities tied to school work; relevant, real-world learning opportunities; college tours and early exposure to college opportunities; partnerships with skills-based alternative education programs, and; nontraditional teaching to support alternative learning styles.

ACTIVE ENGAGEMENT OF OTHER SYSTEMS AND SECTORS

In addressing the dropout problem, it is important to look beyond local education agencies and consider other systems or organizations that are successful in reconnecting youth. Programs such as Youth Opportunity (through the Workforce Investment Act [WIA]) and the Youthful Offender Reentry Program (through the Department of Labor) have a proven track record in this area. The Youth Opportunity program engaged over 90,000 participants—48 percent of whom were out-of-school youth—in education enhancement activities, job-readiness and occupational training, internships, support groups, and many other activities. The YouthBuild U.S.A. Youthful Offender Project exceeded its target outcomes in the areas of enrollment, program completion, receipt of high school diplomas or general educational development credentials, and hourly wage.¹⁶ Additionally, many nonprofits, community-based organizations and private organizations have demonstrated effectiveness in the implementation of alternative education pathways for youth. Many of the most challenged youth are simultaneously involved with other systems or entities, such as Temporary Assistance for Needy Families (TANF), child welfare, or the justice system. Many are also eligible for services through the workforce system or TRIO programs under the Higher Education Act (HEA). The reauthorization of NCLB, WIA, and HEA provides the opportunity to promote a continuum of services and supports and articulation across these systems, allowing for greater alignment of their collective offerings with the needs and requirements of the labor market.

Accordingly, we recommend the following:

- Expand use of federal funds to allow community-based organizations and institutions of higher education with a proven track record of working with struggling students and dropouts to receive funds to serve these students through NCLB.
- NCLB should require states and districts to expand possible partners in educational planning to include the local workforce investment system and youth councils (or similar entities), to ensure the necessary alignment and to coordinate access to workforce preparation activities and experiences. This includes coordinating with the workforce system to provide the programs and strategies needed to ensure successful transition support for youth who are transferring from juvenile justice and other institutions. Similarly, within WIA, workforce boards, through their youth councils, should be encouraged to work with local school districts and employers to accomplish the alignment across systems and to structure the supportive programming that youth need to develop skills needed for labor market success. This will require a restructuring of the composition of the youth councils mandated under WIA to reflect the participation of employers, education and other critical systems.
- Both NCLB and WIA should require local workforce boards and local districts to

develop a plan outlining how the needs of disadvantaged and disconnected youth will be addressed as part of the high school reform and career preparation process, especially as related to preparing them for postsecondary education and labor market success.

- Strengthen supports to youth in detention facilities to facilitate their transition out of institutions into educational and/or training options that lead to postsecondary success or high-growth employment. Encourage partnerships with the local workforce investment system in this regard.

MANDATING GREATER ACCOUNTABILITY

We applaud the National Governor’s Association for its work on a uniform calculation of the graduation rate and for the compact among governors to adopt the four-year cohort method. This information will assist education and other systems serving struggling students and out-of-school youth in the provision, planning and design of education and service delivery that are better aligned with what all students needs to achieve success. Calculation and collection of this data is an important step toward ensuring accountability of education and other youth-serving systems. In implementing this concept, it is important to accurately depict the high school graduation landscape for all students—particularly dropouts returning to education, students enrolled in alternative settings and males of color.

Therefore, we recommend the following:

- Require the use of the four-year cohort method for calculating graduation rates.
- Include calculation of a six-year graduation rate in the accountability system to include students who fall “off track” for graduation but elect to re-enter secondary education to earn a high school diploma.
- Require schools to disaggregate and report dropout and graduation data by subgroups, placing greater emphasis on high school completion rates in calculating adequate yearly progress.
- Include in the graduation rate calculation all youth enrolled in district-sanctioned alternative education pathways and/or nontraditional environments leading to a high school diploma or equivalent credential.

INNOVATION, REPLICATION, ADAPTATION, CAPACITY BUILDING

Dramatically changing the landscape of how high schools prepare youth for postsecondary education success and success in the workforce will require leadership; innovation; willingness to research, test, and replicate promising approaches; technical support, and; professional development. Successful transformation will require expanding the boundaries of where formal learning occurs—from inside the classroom walls to the broader community, workplace, college campuses, and beyond. NCLB should encourage capacity building of local districts to implement these changes and ensure that adequate resources flow to districts to accomplish necessary transformations.

We recommend the following:

- Require local education agencies to articulate specific plans for their outreach to youth who have left school prematurely, and to report progress annually.
- Guide states in the development of sustainable funding formulae to support multiple

pathways to graduation and expanded educational options.

- Authorize adequate funds in federal legislation to meet the needs of significant numbers of students who have left school prematurely or are struggling to remain connected to school.