

Compendium on Programs Supporting College- and Career-Readiness and Success

American Youth Policy Forum

First Draft—June 15, 2009

Table of Contents

Acknowledgements

About This Publication

Executive Summary

Part I

Setting the Stage

Logic Model currently appears as a separate document

Research Notes

Elements of Success

Part II

Program Profiles—*See separate document*

Part III

Outcomes

Policy Recommendations

Part IV

Matrix of Programs—*See separate document*

References

About the Authors

American Youth Policy Forum Publications

Part I

Setting the Stage

It is not a secret that the US education system is failing to prepare a large proportion of the country's youth for long-term success in postsecondary education and the workforce. National policy leaders have increasingly drawn attention to the dropout crisis, the poor performance of many schools, particularly those attended by low-income students and students of color, and the disconcerting gap between the US and other industrialized nations in educational achievement and attainment. Some of the most illustrative statistics bear repeating, to fully appreciate the imperative to improve young people's chances to achieve their educational, professional, and personal goals.

Obtaining a high school diploma is no longer sufficient for youth hoping to land a job paying a family-sustaining wage in today's economy. Without some type of education beyond high school (four-year college, two-year college, an industry certificate, or apprenticeship program), most young adults will find themselves out in the cold in the labor market. Yet, despite the need for postsecondary education, many youth in the US never even earn a high school diploma. Approximately a quarter of all students do not graduate from high school in four years.¹ For the class of 2006, graduation rates hovered at 55% or lower for African American, Native American, and Latino youth, and that number dropped to 44% for African American males.² Across the educational pipeline, African American and Latino students lag approximately two to three years behind their white peers, in terms of achievement and graduation rates.³ According to the Editorial Projects in Education Research Center, approximately 7,200 US students drop out of the pathway to high school completion each day.⁴

Of the students who do graduate from high school, approximately two-thirds enroll directly in a two-year or four-year college, representing a substantial increase in the college-going population since 1980. However, this number conceals gaps based on income, race, and parents' educational attainment that have persisted over time. Low-income students were 23 percentage points less likely to enroll directly in college than high-income students, and the corresponding gap was 35 percentage points when comparing students with a parent with a bachelor's degree with those parents who had no college experience.⁵ Students' background characteristics also have profound implications for the types of institutions of higher education attended; only 9% of the first-year students in the nation's top colleges come from families in the bottom half of the income distribution.⁶ Additionally, a Manhattan Institute study found that only one-third of all high school graduates are qualified for admission to a four-year college, based on their academic coursework and NAEP reading scores.⁷

Getting in the door to college does not necessarily equal college completion, however, and many education policy leaders are calling for a reframing of the goals of education reform from an emphasis on college access to one of college success. While recent efforts to expand access to postsecondary education have yielded positive results, today's student population faces myriad academic, economic,

¹ National Center for Education Statistics, 2009.

² Editorial Projects in Education Research Center, 2009.

³ McKinsey & Company, 2009.

⁴ Editorial Projects in Education Research Center, 2009.

⁵ National Center for Education Statistics, 2009.

⁶ National Center for Education Statistics, 2005.

⁷ Green, J.P. and G. Forster, 2003.

and social challenges that need to be addressed by higher education. Approximately half of all students arrive at college with inadequate skills for credit-bearing coursework, and are placed in remedial education.⁸ Numerous studies have shown that having to take remedial or developmental courses adversely affects students' chances of persisting in college and eventually obtaining a degree. Students who take remedial reading courses are about half as likely to obtain a degree or certificate as those who do not need to take remedial courses.⁹ Only about half of college students currently graduate within 6 years, with significantly lower rates for students of color and those at community colleges. Fewer than 40% of students entering two-year colleges attain any type of degree within six years.¹⁰

Alarming, today's youth are the first generation to be less likely to obtain a college degree than their parents.¹¹ Only about 20% of low-income, African American, and Latino students earn any postsecondary degree. As a group, Latino young adults have not made significant progress in college degree attainment over the last 30 years, while other groups have made substantial gains.¹²

While the US was once the international leader in the level of education of its population, it is now lagging behind other countries in achievement and degree attainment. In particular, the United States' poor performance in math and science, as compared with other industrialized nations, poses significant implications for our future position in the global economy. The results of the 2006 Program for International Student Assessment (PISA) show that the 15-year-olds in the United States ranked 25th out of 30 nations in math literacy and 24th in science literacy, and the US also has greater income-based achievement gaps than the world leaders. Furthermore, in the past decade, the US has fallen from first place to 14th in terms of college graduation rates.¹³

In addition to low levels of college-readiness, young people are also leaving high school without the critical skills and competencies for success in the labor market. Employers indicate that the level of preparation of many youth is inadequate for entry-level jobs in fields offering career ladders and pathways to a family-sustaining wage. Sixty percent of employers rate high school graduates' basic skills as "fair or poor."¹⁴ In particular, recent surveys point to deficits in the area that has been dubbed "21st Century skills," which includes qualities such as analysis, innovation, problem-solving, and effective communication. According to Wagner (2008) "young people who want to earn more than minimum wage and who go out into the world without the new survival skills [critical thinking and problem solving, collaboration across networks and leading by influence, agility and adaptability, initiative and entrepreneurialism, effective oral and written communication, accessing and analyzing information, and curiosity and imagination] are crippled for life ... Parents and educators who do not attend to these skills are putting their children at an increased risk of not being able to get and keep a good job, grow as learners, or make positive contributions."¹⁵

⁸ American Diploma Project, 2004.

⁹ National Center for Education Statistics, 2004.

¹⁰ McIntosh and Rouse, 2009.

¹¹ OECD, 2006. *Education at a Glance*.

¹² Gandara, P., 2009.

¹³ National Governor's Association, 2008.

¹⁴ Public Agenda, 2002.

¹⁵ Wagner, T., 2008.

Why Does More Education Matter?

During his first address to a joint session of Congress in February 2009, President Obama framed improvements in educational attainment as a national priority, as he stated, "In a global economy, where the most valuable skill you can sell is your knowledge, a good education is no longer just a pathway to opportunity. It is a pre-requisite." Consequently, the President called on every American to pursue at least one year of postsecondary education. The inadequate level of college- and career readiness of many youth bears significant consequences for the future success and wellbeing of these individuals, their communities, and the country as a whole.

Postsecondary education plays an increasingly important role in economic mobility, and the financial benefits of education for young adults have only risen since the 1980s.¹⁶ In 2007, the median earnings of young adults with a bachelor's degree were \$45,000, compared to \$29,000 for those with a high school diploma or its equivalent and \$23,000 for those who did not earn a high school diploma or equivalent degree.¹⁷ In other words, college graduates earn approximately a million dollars more over their lifetimes than those only a high school diploma.¹⁸ Higher levels of education translate to higher earnings for all racial and ethnic groups. In the knowledge-based, global economy of the 21st century, the returns from education will likely continue to rise.¹⁹ By 2014, 22 of the 30 highest growth industries will require some postsecondary education.²⁰

Education also leads to improved health and increased civic participation. The National Center for Education Statistics found that the higher a person's level of education, the more likely they were to report being in "excellent" or "very good" health, regardless of income.²¹ Adults with higher levels of education are also more likely to vote than those with less education.²² Furthermore, the education of today's youth bears significance for the next generation, as parental education is a strong predictor of children's achievement, college-going rates, and future income.²³

Employers have a strong stake in career-readiness, as they struggle to meet their human capital needs and maintain a competitive advantage over other nations. When young people enter the labor market unprepared, corporations often must invest in additional education and training for their employees. One study estimated the cost of remedial training in reading, writing, and mathematics to a single state's employers at nearly \$40 million a year.²⁴

The achievement gaps between the US and other countries, as well as those based on income and race, have a substantial impact on the nation's economic health. According to estimates by McKinsey & Company, if the US had closed the international achievement gap over the last 15 years and raised performance to the level of world-leaders Finland and North Korea, the US Gross Domestic Product

¹⁶ National Center for Education Statistics, 2007.

¹⁷ National Center for Education Statistics, 2009.

¹⁸ Cheeseman Day and Newburger, 2002.

¹⁹ Osterman, P., 2008.

²⁰ Bureau of Labor Statistics. In *Postsecondary Success*, Bill & Melinda Gates Foundation, 2008.

²¹ National Center for Education Statistics, 2004.

²² Baum, S. and J. Ma, 2007.

²³ Ibid.

²⁴ Mackinac Center for Public Policy, 2000.

(GDP) would have risen by 9 to 16 percent, for a gain of \$1.3 trillion to \$2.3 trillion. Closing the income, racial, and systems-based achievement gaps would have brought similar benefits; erasing the inequality between the performance of high- and low-socioeconomic status (SES) students would have brought the GDP up an additional \$400 billion to \$670 billion.²⁵

Raising the level of educational and career success of all youth is particularly pressing in light of the changing demographics of US schools and labor markets. While 78% of public school students were white in 1972, the proportion of white students had dropped to 56% by 2007. This change was largely a result of growth in the Latino student population, which experienced a fivefold increase over the same time period and now represents 21% of all students.²⁶ Nearly all large urban school districts are now majority non-white.²⁷ Closing the achievement gap, in many areas, is virtually synonymous with improving the performance of all students.

The K-12 educational system, higher education, youth service providers, and communities all share the imperative to improve young peoples' chances of postsecondary success. Interventions across different systems have the potential to improve students' academic preparation, enhance 21st Century skills, and help young people develop the social and emotional maturity necessary for successful transitions to adulthood.

Defining College- and Career-Readiness

Despite widespread acknowledgement that young people need to be prepared for postsecondary education and careers, the education community has yet to reach a consensus on the definition of college- and career-readiness. There is also debate over whether college- and career-readiness are the same thing or whether they require different skills and knowledge. Definitions of college- and career-readiness that focus exclusively on academic indicators, such as the ability to complete credit-bearing college coursework without remediation, only capture a partial picture of the preparation that is needed for success after high school. College and career readiness needs to be viewed in a much broader context that considers other important skills and that sets up students for success over the long term. In this section we discuss various aspects of college- and career-readiness and close by providing our definition of readiness for success.

Do College- and Career-Readiness Mean the Same Thing?

Various studies have been conducted to examine the convergence between the knowledge and skills needed to be college-ready and career-ready. According to a 2006 ACT study, comparable levels of preparation in reading and mathematics are required for success in credit-bearing college courses and workforce training programs focused on job-specific skills.²⁸ ACT defined workforce readiness by focusing on occupations that are projected to grow in the future, are likely to pay a family-sustaining wage, and provide potential for career advancement. Many of these jobs do not require a bachelor's degree, but they do require vocational training or some postsecondary

²⁵ McKinsey & Company, 2009.

²⁶ National Center for Education Statistics, 2009.

²⁷ Gandara, 2009.

²⁸ ACT, 2006.

education. The level of knowledge and skills required for entry-level jobs in these fields, based upon scores on WorkKeys, ACT's job skills assessment system, were compared with the ACT's College Readiness Benchmarks, or the minimum ACT test scores required to have a high probability of success in a credit-bearing, first-year college course, and were found to be equivalent.

The American Diploma Project (ADP), an initiative of Achieve, Inc., the Education Trust, and the Thomas B. Fordham Foundation, also found important convergence around the skills that youth should possess in order to be ready for college or careers in high-performance, high-growth fields, according to their survey of leaders in K-12 education, postsecondary education, and the business sector. The ADP established a set of benchmarks based on the level of knowledge and skills required for entrance into such careers and credit-bearing college courses, and they state that students who meet these standards will be prepared for success, whatever path they choose to pursue after high school.²⁹

Some would argue that being career-ready requires an additional set of skills that is usually not taught in high schools. These skills include ones that employers rank very high in terms of job success, and it is often the lack of these skills that prevent young people from being hired or holding a job. Several recent surveys of employers have reported that young people are entering the labor market with an inadequate level of preparation, particularly with regard to 21st Century skills. In a joint study of over 400 employers across the United States, the Conference Board, Corporate Voices for Working Families, Partnership for 21st Century Skills, and the Society for Human Resource Management (2006)³⁰ found that professionalism/work ethic, teamwork/collaboration, and oral communications were ranked as the three most important applied skills for new workforce entrants, yet employers rated the average high school graduate as deficient in these areas. And, youth from underserved communities are the least likely to have had opportunities to develop these skills during high school, if they have not been exposed to on-the-job learning opportunities and internships, extracurricular activities, and leadership opportunities. Given that many young people are not taught essential employability skills in school or they don't have opportunities like internships, apprenticeships, service-learning, or paid or unpaid work to learn them, it is little surprise there is a gap between the skills employers want and the skills young people possess. The college- and career-readiness agenda needs to acknowledge these broad-based life skills and incorporate them more intentionally into school and learning opportunities for youth.

Youth and young adults aspire to different career and life goals, and it should be obvious that their pathways will differ. For example, the postsecondary education pathway for a Certified Production Assistant or a Registered Nurse is very different than the pathway for a college history professor or attorney, even though the certificate holder may ultimately pursue a higher level of education. It is appropriate that the divergence in learning paths for earning an occupational or technical certificate and earning a degree occur at the postsecondary education level, not in high school. For that reason, we strongly support a common baseline academic foundation for all high school students, whether they plan to pursue a technical career soon after high school or they intend to earn a higher level degree. And, we strongly believe that the young people that must or choose to work right after high school graduation (often due to family circumstances), must also have this same baseline academic preparation so they are in a position to enter postsecondary education when their circumstances might be more favorable or when they recognize the need for additional education and training. But in addition to ensuring a common academic foundation, we believe that youth need exposure to and opportunities to

²⁹ Achieve, Inc., 2004.

³⁰ *Are they really ready to work? Employer perspectives on 21st Century skills.*

develop other important skills, like teamwork, communication, and professionalism, to help them on their pathway to a solid economic future.

Lastly, because in today's economy the average person will have six to eight careers in his or her lifetime, it is essential that young people develop foundational and transferable skills and knowledge that will help them navigate these future transitions.

A Broadened Perspective on College- and Career-Readiness

The traditional vision of college-readiness, which has emphasized academic course grades and standardized test scores, may fail to fully capture the developmental process required for youth to enter, succeed in, and graduate from postsecondary education and training. Increasingly, researchers and policy analysts are recognizing that the necessary qualities for persistence in and completion of postsecondary education involve more than just academic components. A brief review of the multiple perspectives on what it takes for youth to be ready for postsecondary success helps to inform the logic model developed by AYPF and helps explain why there is such a broad and diverse range of programs highlighted in this compendium.

There is a significant research base that identifies high school academic preparation in core courses as a strong predictor of college success.³¹ But the curriculum taken in high school does not singularly explain why some students enroll or persist in college. The College Board now recommends a college readiness system that includes a sequence of rigorous courses in core subjects, training in "advanced academic skills," and assistance with planning for college and career options. Recently, education leaders have sought to define additional indicators of college readiness beyond the typical components of a college application, including "noncognitive measures."

According to the Institute for Higher Education Policy (IHEP), "Noncognitive measures are used to evaluate such characteristics as adjustment, motivation, and student perceptions, which are not measurable using typical standardized tests."³² The Gates Millennium Scholars program, which aims to provide high-achieving, low-income, minority students with 4-year college scholarships, represents an early implementer of noncognitive measures for college readiness. The program incorporates noncognitive assessments into its selection process, by rating students in eight categories that have been linked to successful outcomes for minority students, such as positive self-concept and successful leadership experience. The College Board has also initiated several research projects to identify higher education admissions tools that are more relevant for the 21st Century, including noncognitive measures.

Many other groups of policy advocates, educators, and researchers offer their own visions of the comprehensive set of knowledge and skills required for college and career success. Conley (2007) argues that a more comprehensive definition of college readiness should include key cognitive strategies, key content, academic behaviors, and contextual skills and awareness.³³ Key cognitive strategies refer to the ways of thinking that are associated with college success, according to studies of college faculty members. These include intellectual openness, analysis, interpretation and problem solving. Conley differentiates academic skills (such as writing and research) from knowledge of core academic subjects.

³¹ Adelman, 1999.

³² Ramsey, Jennifer, 2008.

³³ Conley, David T., 2007.

Academic behaviors associated with success include study skills and self-monitoring, or the ability to analyze one’s own thinking and level of understanding. Contextual skills and awareness involve college knowledge, including an understanding of the college admissions and selection processes, the options available to help pay for a college education, the academic requirements for college-level work, and knowing about and understanding the culture of college.

Departing from a slightly different perspective, the Partnership for 21st Century Skills presents a framework that defines core outcomes necessary for students to “succeed in work and life in the 21st Century,” which shares similar components and offers some additions. The interconnected elements of this framework include Core Subjects and 21st Century Themes; Learning and Innovation Skills; Information, Media and Technology Skills; and Life and Career Skills. Core academic subjects are considered essential for all students, but the Partnership recommends that course content be augmented to include themes of increasing relevance in global economy, such as: “global awareness, financial, economic, business and entrepreneurial literacy, and civic and health literacy.”

The Partnership’s concept of “learning and innovation skills” reflects the same higher-order cognitive strategies that are promoted by Conley’s model, such as critical thinking and problem solving, and they also add an emphasis on creativity and innovation, along with communication and collaboration. “Life and career skills” include qualities such as initiative, leadership, flexibility, productivity, and social and cross-cultural skills.³⁴

The Importance of Youth Development

“Youth development is defined as the ongoing process in which all young people are engaged and invested. Through youth development, young people attempt to meet their basic personal and social needs and to build competencies necessary for successful adolescence and adult life. It is an approach, a framework, a way to think about young people that focuses on their capacities, strengths, and developmental needs and not on their weaknesses and problems. All young people have basic needs that are critical to survival and healthy development. They include a sense of safety and structure; belonging and membership; self-worth and an ability to contribute; independence and control over one's life; closeness and several good relationships; and competency and mastery. At the same time, to succeed as adults, all youth must acquire positive attitudes and appropriate behaviors and skills in five areas: health; personal/social; knowledge, reasoning and creativity; vocation; and citizenship.”³⁵

While academic knowledge and skills are necessary for college- and career-readiness, youth have fundamental needs that must be met for the sake of their personal wellbeing, competency, and development. Lack of safety, mental and physical health problems, and economic hardship can all pose obstacles to their learning and growth. According to Maslow’s hierarchy of needs, individuals must ensure that their physiological needs, safety, and desire for love and belonging are met before they can achieve their higher-order needs of esteem and self-actualization. It is particularly important that programs and structures promoting college- and career-readiness recognize the critical needs of vulnerable populations, such as youth who are homeless, in the foster care system, or recent newcomers to the United States, who often have multiple and varied needs.

³⁴ http://www.21stcenturyskills.org/documents/p21_framework_definitions_052909.pdf

³⁵ Politz, B. 1996. Academy for Educational Development.

Despite the growing recognition of a broader set of indicators and competencies that comprise college- and career-readiness, this conversation seldom addresses the personal development necessary for success. A report by Child Trends (2008)³⁶ highlights the intersections and points of divergence between the college-ready, career-ready, and youth development fields. They find that all three fields share many common goals and core competencies, including an emphasis on many aspects of psychological development, such as goal-setting and planning, self-management, and motivational strategies. All three fields also maintain that youth need critical thinking, reasoning, problem solving, and lifelong learning skills, as well as social competence. Other critical elements of youth development research are seldom mentioned in the college- and career-ready literature, such as physical safety, positive mental health, resilience, flexibility, a strong moral character, creativity, and spiritual development.

The developmental needs of late adolescence and the passage into early adulthood make the postsecondary transition one of the most complex and challenging times in many people's lives. According to developmental theorists, youth at this stage need to adapt to more demanding roles, and to identify their strengths, weaknesses, and the necessary skills to be acquired to fulfill these roles. Youth disengagement from school during adolescence can be a function of a poor fit between the school environment and the adolescent's developmental needs. Zarret and Eccles (2006) note that personal self-efficacy, social skills, self-esteem, and coping skills play a critical role in a student's ability to successfully navigate the high school environment, and interventions that foster these developmental assets may help students stay on track for college- and career-readiness. Similar personal resources play a key role in college enrollment and persistence, along with labor market success. Since not all youth are provided equal opportunities to develop these key qualities and explore new roles, however, it is increasingly important for schools, postsecondary institutions, and other youth-serving programs to ensure that participants receive ongoing support for their social and emotional development at all stages.³⁷

College Knowledge

In addition to having the necessary combination of knowledge, skills, and social and emotional development, students need to be able to navigate the complex application, selection, and financial aid processes in order to access postsecondary education. Low-income and first-generation college students often face particular challenges in making the step from readiness to enrollment, let alone persistence, in college. College access research typically points to informational, financial, and social barriers commonly faced by students from underrepresented groups.

Researchers have noted an overall mismatch between students' educational aspirations, academic qualifications, and their actual college-going rates. Many youth may be lost in the college admissions process, and unaware of the necessary steps and recommended timeline to achieve acceptance. The Consortium on Chicago School Research at the University of Chicago (2008)³⁸ found that only 59% of Chicago Public School (CPS) students who said that they wanted to attend a 4-year college even applied to a 4-year institution during their senior year, and only 41% actually enrolled in a 4-year college. Even high-achieving students with the qualifications to attend selective institutions often failed to apply for 4-year colleges, or applied to colleges below their potential. Additionally, students from underrepresented groups often face social barriers to postsecondary education, as they are less likely to have role models

³⁶ Child Trends, 2008.

³⁷ Zarrett, N. and J. Eccles, 2006.

³⁸ Roderick, M., J. Nagaoka, V. Coca and E. Moeller, 2008.

who have attended higher education and may have less collective “college knowledge” in their communities.

The University of Chicago study also found that attending a high school with a strong “college-going culture” was the most consistent predictor of whether students took the steps required for college enrollment, underscoring the importance of receiving timely information and assistance with the college application process. This impact was particularly strong for Latino students, many of whom may be first-generation college students.

Findings from a national survey of high school graduates and counselors by IHEP (2008)³⁹ indicate that academically qualified students are also deterred by the high cost of college tuition and concerns about the availability of financial aid. There may be a misperception that students and families cannot afford college costs, due to the complexity and lack of transparency of the financial aid process. The University of Chicago research found that students who take the step to fill out the Free Application for Federal Student Aid (FAFSA) are much more likely to enroll in college than other students with equivalent qualifications and aspirations.

Career Awareness

Many of the same barriers to college access also affect young people’s access to living-wage careers. Early paid work experience helps youth develop important 21st Century skills and has been linked to future career and educational success, but many youth are unable to find quality jobs that are both financially and developmentally rewarding. Many youth are not prepared with the skills and technical knowledge that employers are looking for, and they also lack the social capital needed to navigate both formal and informal job networks.

Youth employment prospects are particularly dismal in the context of an economic downturn. The unemployment rate for youth ages 16-19 reached a 20-year high of 20% in July 2008. Summer teen employment rates were reportedly at their lowest in over 60 years.⁴⁰

Informational and social barriers also affect a young person’s decision-making and career planning process. The Alfred P. Sloan Study of Youth and Social Development found that low-income and minority youth often have difficulty identifying potential career opportunities. However, the presence of adult role models that are employed in various fields helps youth identify specific job opportunities and career pathways. Many high school guidance counselors are not able to assist students with career exploration, assessment and development, and are often unfamiliar with industry certification programs and work-based learning opportunities due to large case loads and the focus on college enrollment. If youth are not exposed to relevant information about current employment and training opportunities in either their communities or traditional school environments, it is all the more important for high school reform models, alternative schools, expanded learning opportunities, and dual enrollment programs to help participants make these critical connections.

In today’s unforgiving labor market, disadvantaged youth who are high school dropouts, ex-offenders, aging out of the foster care system, English Language Learners, or students with disabilities have the hardest time overcoming labor market barriers, and are most likely to join the growing ranks of

³⁹ Hahn, R. D. and D. Price, 2008.

⁴⁰ Bureau of Labor Statistics, in National Youth Employment Coalition, 2008.

disconnected youth. An estimated 3.8 million youth ages 18 to 24, roughly 15% of the young adult population, are disconnected from both school and work.⁴¹ These young people need onramp opportunities that can help them to build the knowledge, skills, and social capital necessary for economic self-sufficiency.

College Retention and Success

While an extensive research base points to multiple barriers to entry into postsecondary education and jobs paying a family-sustaining wage, less attention has been paid, until recently, to the critical issue of inadequate and unequal success rates in higher education. A necessary component of college success is retention, or persistence, from semesters to semester and from year to year, during the lengthy and demanding process of earning a postsecondary degree. Community colleges have particularly low retention rates, with only one-half of first-time students at two-year colleges persisting to the second year, compared with three-quarters of entering students at four-year colleges.⁴² The reasons young people leave college likely range from personal factors such as financial hardship and academic difficulties to institutional factors related to the college environment. As McIntosh and Rouse (2009) articulate, “Students will perceive that the effort required to remain enrolled may not be worth the perceived benefits if the courses are not well taught, if they do not feel well integrated into the institution, or if the institution does not provide adequate support.”⁴³ In order to adapt to and thrive in the college environment, which is often more demanding, self-directed and impersonal than at high school level, youth need opportunities to learn new cultural codes, develop supportive relationships, and enhance their self-advocacy skills and perseverance.

Definition of College- and Career-Readiness for Success

Given our broad construction of College- and Career-Readiness, AYPF is using the following definition in this publication:

Readiness means being prepared to successfully complete credit-bearing college coursework without remediation, having the academic skills and self-motivation necessary to persist and progress in postsecondary education, and having identified career goals and the necessary steps to achieve them. Readiness also requires the developmental maturity to thrive with the level of independence offered by postsecondary education and careers, the cultural knowledge to understand the expectations of the college environment, and the 21st Century skills to meet employer expectations in an innovation-based economy.

A Logic Model for College- and Career-Readiness and Success

“Readiness” for college and careers represents a complex undertaking and goal. It requires many different systems and providers that serve youth and their families to act with clear, consistent goals at the same time as they respond to the individuals needs of each young person based on age, academic

⁴¹ Annie E. Casey Foundation (2004). *Kids Count Data Book*. Baltimore, MD.

⁴² National Center on Education Statistics, in Center for American Progress, 2009.

⁴³ Center for American Progress.

and personal development, and family circumstances. Because the process of developing young people who are college- and career-ready proves complicated and multi-faceted, AYPF has developed a comprehensive logic model to illustrate what it takes for youth to be prepared for postsecondary success in the 21st Century and how a breadth of interventions can help youth navigate the various stages of this process. This model is illustrated in Figure 1 (*see the separate one-page, legal-sized document: “AYPF Logic Model”*).

This logic model is situated in the context of positive youth development, which recognizes that young people must develop skills and competencies in various and multiple domains in order to be successful as adults. No two adolescents are the same, and they need attention at different times in their lives, on different facets of their development, and in varying intensity, based on their personal circumstances. Rather than a trajectory with distinct phases, the logic model should be viewed as a fluid set of experiences and processes, allowing youth to continually build their knowledge and skills, offering onramps and support systems at every level, and incorporating choices and multiple opportunities for young people to shape their own pathway to success.

AYPF posits that if young people are provided with or have access to a range of quality supports that provide for the attainment of skills, knowledge, and competencies, help students plan for postsecondary education and careers, and contribute to their personal development and wellbeing, they will be college- and career-ready. This assumes that the young person has received guidance from a caring, competent adult in her life, or has otherwise developed the resilience and motivation necessary to navigate her developmental journey. With such guidance, most young people find their way. The challenge is that many youth face considerable barriers to college and career success, lack the guidance or coping skills to find the appropriate resources to help with the transition to adulthood, or do not know when, or even if, they need help. Our logic model is based on the assumption that a young person will be more likely to navigate this pathway with an adult advocate(s) to provide guidance and match services and supports to various needs. In many cases, this will be a parent, who is obviously in the best position to provide “case management” to the young person, but there might be several adults throughout the course of middle and high school and college that help steer and guide the young person to services and supports. While we do not intend to overlook the importance of a strong foundation of skills, knowledge, and developmental supports in early childhood and at the elementary school level, our logic model focuses on youth at the stages of middle school, high school, postsecondary education and early adulthood.

Our logic model is also based on the expectation that the various providers of education and youth services (K-12, postsecondary, community, expanded learning opportunities, etc.) work together to organize a comprehensive approach to ensuring a young person is supported. This could take the form of partnerships between elementary, middle and high schools, postsecondary education, employers, and community-based organizations, as well as programs within sectors partnering with each other. The notion of partnerships across systems and programs suggests that each program or service provider shares some responsibility for the healthy development and success of each young person.

AYPF believes that the ultimate goal of any effort to help students be college- and career-ready is to develop economically independent adults, who are involved in their communities and civic life, and who value and participate in continuous learning.

We have also identified short-term and intermediate goals and outcomes as part of our logic model, but we strongly believe that all systems should be focused on the ultimate goals of **career success, civic**

engagement, and the **capacity for lifelong learning**. In the description of the logic model, we start with a description of the inputs needed to build readiness, and follow with a discussion of the short-term, intermediate, and long-term outcomes. At the end of this section we provide vignettes of how three fictitious students with differing life situations move through the logic model to college and career success.

Foundation for Success

In order to be prepared for college and career success, in accordance with AYPF's broad definition of readiness, youth at all stages of development (secondary and postsecondary education) need a foundation consisting of three main categories of inputs: **Skills and Knowledge, Future Orientation, and Personal Development and Wellbeing**.

Skills and Knowledge

The Skills and Knowledge category contains the fundamental types of academic and career-related learning at each level of education, including academic knowledge, academic success behaviors, technical knowledge and skills, and 21st Century skills. All young people need a strong base of **academic knowledge**. At the secondary level, this knowledge can be promoted through a rigorous core curriculum at all levels, along with opportunities for students to reinforce mastery and review key concepts. While content knowledge is deepened and refined at the postsecondary level, students may also need continued opportunities to review and apply basic principles and skills. Academic knowledge must be combined with **academic success behaviors**, such as study skills and other learning habits that allow youth to meet the demands of postsecondary education and be successful. These strategies can be taught and practiced both in the classroom and through expanded learning opportunities, as well as in "college success" classes at the postsecondary level.

Today's youth also need to develop **technical knowledge and skills**, which may be differentiated depending on their career path. Information technology skills are now basic requirements for virtually all types of employment. Young people who are interested in pursuing technical certification or vocational degree programs obviously need a more specific and highly refined set of industry-specific skills. Students in middle and high school should be introduced to the technical knowledge and skills needed in different career fields and begin to develop the abilities that are relevant to their career goals, and they should develop much more specialized expertise at the postsecondary level. **21st Century skills** encompass abilities such as effective communication, problem-solving, creativity, and teamwork. Such skills can be fostered both inside and outside of the classroom at all age levels, through project-based learning, presentations, employment, internships, community service and other opportunities.

Future Orientation

While youth are developing skills and knowledge, it is critical that they also develop and maintain a Future Orientation which include elements of goal-setting, college and career knowledge, financial resources, and persistence. Such a focus allows young people to plan for the next step in their personal and professional development, and to see their current efforts as connected to a longer-term objective. Youth of all ages must engage in a process of **goal-setting**, which can be informed and supported by high-quality counselors, inspiring mentors, and exposure to various career fields and academic environments. Students at the secondary level must develop **college- and career-knowledge**, which refers to an awareness of various career pathways and their requisite educational preparation, along

with an understanding of how to navigate the college planning, admissions, and selection processes. Postsecondary education and training require substantial investments of **financial resources**, and youth at the secondary and postsecondary levels need to determine how they will support their education, whether through scholarships, financial aid, paid work experience, or parental support. Beyond high school, a future orientation is reflected by **persistence in postsecondary education**. Persistence involves the cultural knowledge and self-advocacy skills to adapt to and navigate the college or university environment, which can be facilitated through learning communities or other supportive programs for incoming or struggling college students.

Personal Development and Wellbeing

Finally, young people need a supportive foundation for their Personal Development and Wellbeing. The goals of college- and career-readiness cannot be achieved without attention to young people's physical and emotional needs, ranging from health to housing and safety. During adolescence, youth must build the coping skills to confront challenges and develop the positive self-esteem, motivation, and perseverance necessary to stay on track toward their goals. Young adults at the postsecondary level also need opportunities to develop the maturity and independence to assume personal responsibility for their actions and make positive decisions, as well as chances to understand their role in a broader social context. Programs, schools, and colleges that take a holistic approach to learning, by providing comprehensive student supports, offering caring relationships and safe environments, and implementing increasing levels of responsibility for youth provide such a foundation.

Providers and Interventions

The Foundation for Success, along with the short-term and intermediate outcomes of the logic model, is influenced by a variety of Providers and Interventions, as demonstrated in the horizontal box at the bottom of the Logic Model. This list includes can agents across multiple settings and levels of education, in both the private and public spheres. Some students receive most of their assistance with goal-setting and college knowledge from role models in their own families, and many households ensure that young people are safe, healthy, and emotionally supported.

As the programs in the compendium demonstrate, schools, colleges, expanded learning opportunities, alternative education programs, and employers all play a role in ensuring that vulnerable groups of students and those from groups underrepresented in higher education receive these critical inputs. The various types of programs represent a number of ways of structuring and delivering such inputs. Academic interventions range from dual enrollment opportunities that allow high school students to receive both secondary and postsecondary credit, to summer enrichment institutes on college campuses, accelerated programs for students who are behind grade level, and increased tutoring for students at community colleges. Career Academies, innovations in career-and-technical education, service learning and internships help youth to expose youth to various career fields, connect academic learning to real-world applications, and develop 21st Century skills. Many college access and school reform initiatives help to provide early college information and guide students through the applications and admissions processes, and some help students to practice the time management and study skills they will need to meet the demands of college courses. The 26 featured programs in this compendium provide examples of the wide range of models and practices that help develop a foundation for college- and career-readiness and success.

Short-Term Outcomes—Secondary Level

We posit that if young people receive the various supports to develop the foundation for success, they will achieve certain short-term outcomes at the secondary school level. The programs included in this compendium serving middle or high school students have demonstrated effectiveness in helping youth achieve success in at least one of these outcome areas.

For middle and high school students, there are several measurable indicators of **secondary education academic outcomes**. These outcomes include, but are not limited to: attendance, achievement test scores, passing one's classes and accruing credits, being promoted on-time, enrolling in advanced courses, completing a core academic curriculum, and ultimately obtaining a high school diploma or GED.

There are also various ways to measure **outcomes related to planning for postsecondary**. Some outcomes, such as the completion of applications for financial aid, are easily observable, while other important outcomes include changes in students' college knowledge and educational aspirations.

Finally, **personal development and wellbeing outcomes** at the pre-college level include reduced risky behaviors, improved health and wellness, increased student engagement and motivation, increased leadership and recognition for success, and heightened self-efficacy.

Intermediate Outcomes—Postsecondary Level

Moving along the path to success, we identified key intermediate outcomes at the postsecondary level for students who successfully navigate high school. Successful completion of the components of college- and career-readiness at the high school level greatly improves youth's prospects for positive outcomes in postsecondary education, vocational training and employment, and personal development during early adulthood. The postsecondary level programs included in this compendium have demonstrated effectiveness in helping youth achieve success in at least one of these outcome areas.

Postsecondary education academic outcomes involve not only enrolling in college, but also persisting, progressing, and eventually graduating with a postsecondary degree or certificate. Measurable outcomes along this pathway also include passing placement exams and progressing beyond remedial courses, accruing credits, achieving good grades and passing one's classes, persistence from semester to semester, and retaining good academic standing.

Career-related outcomes include finding and maintaining employment and improving one's earnings after high school. This category also includes successfully completing postsecondary vocational training programs or apprenticeships, and earning industry-recognized credentials or degrees.

Personal development and wellbeing outcomes during early adulthood include many of the same elements that are important during middle and high school, such as health and wellness, self-efficacy, academic self-concept, and engagement in education. At this level, important indicators of maturity also include measures of independence and self-sufficiency.

Long-term Outcomes:

As referenced above, the long-term goals of the AYPF logic model are **career success, civic engagement, and the capacity for lifelong learning**. AYPF defines career success as employment that pays a family-sustaining wage, fulfills one's professional aspirations, and offers career ladders and opportunities for

growth. Civic engagement, conceptualized broadly, allows an individual to feel connected to a larger social fabric and to develop a sense of responsibility to others, and empowers people to participate in the democratic process. The capacity for lifelong learning is the key to professional advancement and allows a person to return to education and training to gain new skills or prepare for a career change. Having gone through the experiences of preparing for postsecondary education, progressing through increasing levels of educational rigor and developing learning skills, adults hopefully feel competent to navigate the education and training universe on their own. The majority of program evaluations in the compendium do not demonstrate effectiveness in terms of long-term outcomes as most are not designed to follow students for a long period of time, nor do they measure their performance in these items.

Examples of the Logic Model in Action: Vignettes

In order to demonstrate how diverse youth receive the necessary inputs of the logic model and progress through positive short-term and intermediate outcomes, we present three fictional accounts of young peoples' experiences on the pathway to college and career success.

- a) Student A is in the 12th grade in a well-respected high school with a rigorous, college-preparatory curriculum. Her grades are mostly As and Bs, though she struggles with math. In addition to receiving extra help from her teachers and her father, she meets with a private math tutor once a week. Her parents both have 4-year college degrees, they have been saving for her college tuition since her early childhood, and they have taken her to visit college campuses. She has a good relationship with her college counselor as well as her English teacher, who both help to answer her questions about the college application process. Her afterschool activities include playing on the basketball team, participating in school plays, and volunteering as a tutor for younger students. During the summers, she has worked and held internships, helping her to build teamwork, maturity, and self-esteem. She plans to attend a 4-year college and major in psychology, with a long-term goal of working as a clinical psychologist. She feels academically prepared for college, but she is concerned about how much social support she will receive once she leaves home, and she is not sure who she will be able to turn to for help on a large university campus. In this case, Student A would most benefit from support in the transition to college, such as mentorship, a learning communities program or another cohort model for incoming students, advising, and programs building the self-advocacy skills needed in the college environment.
- b) Student B is in his first semester at a local community college. It has not been an easy path for him to get to postsecondary education, but he has benefitted from a number of supportive programs. Like many of his peers, he was scoring below grade level on standardized tests at the end of middle school. While he went to a high-poverty high school, his school had recently implemented a comprehensive reform initiative that included small learning communities based on career themes and more rigorous courses for all students. He developed a close relationship with his teachers, who helped him recognize his strengths, and also encouraged him to enroll in tutoring and weekend enrichment classes.

Though Student B had not originally planned to go to college, he began to think

about higher education after he started participating in an afterschool college access program that was offered through a partnership between his school district and the community college. Through this program, he took a “college success” class on the college campus and met regularly with a mentor who was an alumnus of the same high school and had continued his education to earn a 4-year college degree. Student B had always had strong technical skills, and his high school helped him to explore different career fields in this area. He learned about interesting job opportunities and growing demand in the field of environmental technology and regulation. The summer before his senior year, he had the opportunity to intern in the environmental compliance department of a manufacturing firm. After he learned about the community college’s Associate’s degree program in Environmental Technology, he set his sights on this goal.

The transition to college has been difficult for him, as the classes are very demanding and he has trouble balancing his academic workload and his part-time job. Fortunately, he recently learned about a program for new students on his campus that provides extra tutoring and counseling, as well as workshops on time management and accessing college resources. He plans to continue on his path to the Associate’s degree, and he thinks he might even go back to school to earn a 4-year degree after working in the field for a few years.

- c) Student C is in an alternative high school, and she is two credits away from earning her high school diploma. Two years ago she dropped out of school because she was struggling with family and personal problems, and she was unable to keep up in her classes because she missed so much school. She eventually moved out of her parents’ house and started staying with an aunt. She got a job at the mall, where she had a supportive employer and coworkers, and her self-esteem improved when they gave her increasing responsibilities and recognized her strong communication skills. She still wanted to earn her high school diploma, and she decided to try going back to school when a coworker told her about an alternative high school that offered a flexible schedule and helped older students to get their diploma. At her new school, she has a case manager who has connected her with mental health counseling and a free medical clinic, and who makes sure that she stays on track. She has small classes and knows her teachers and peers well. Most of her classes have final projects, instead of exams, which have helped her to develop her teamwork, creativity, and critical thinking abilities. Her high school has already allowed her to earn eight college credits in Health Studies, and she is planning to continue at the community college. Because of her personal skills and the knowledge she has gained from her life experience, she is interested in becoming a Certified Substance Abuse Counselor.

These vignettes illustrate how three young people have experienced the secondary-postsecondary transition, and how they have relied on a variety of sources of support to help them build important skills and knowledge, increase their exposure and access to postsecondary education and careers, further their personal development, and enhance their wellbeing. Through their trajectories, one can identify the multiple avenues, interventions, and programs that have helped these youth to attain the

inputs in the logic model, and to achieve short-term and intermediate success. All of these students will also need continued academic, career-related, and social support at the postsecondary level, in order to ensure their persistence and success in higher education. These personal glimpses of three diverse pathways provide a preview of the breadth of effective programs and interventions designed to help young people progress toward college- and career-readiness, all part of a broader focus on comprehensive youth development.

Introducing the Types of Programs in the Compendium

The 26 programs profiled in this compendium represent the wide range of programs, schools, and educational models that support students' progress along the pathway to postsecondary success presented by the AYPF logic model. These interventions serve diverse student populations through a range of learning environments, and the models are designed to target differing objectives and goals. In one way or another, they all help young people progress toward the ultimate goals of career success, civic engagement, and the capacity for lifelong learning.

Two of the programs in the compendium serve exclusively middle school students, with an emphasis on early preparation for college and careers. There are ten programs that span the middle and high school levels. Some of these programs are comprehensive school reform or integrated student service models serving grades K-12, though for the purposes of this compendium we have focused on evaluations of their interventions at the secondary level. Others are college readiness and access initiatives, or expanded learning opportunities providing academic and social support that begin at the middle school level and continue through high school.

Twelve programs serve only high school students. These programs also run the gamut from dual enrollment opportunities that simultaneously offer high school and college credit to afterschool programs focused on career exploration and the college admissions process. Some constitute structural reforms while others offer new models of instruction and assessment, and their target populations range from high-achieving, low-income students to youth who have dropped out. Finally, three programs in the compendium operate exclusively at the postsecondary level, as initiatives to improve students' readiness for college coursework and help them to progress toward the successful completion of a college degree.

Research Notes

This section describes the process by which AYPF identified program evaluations for inclusion in this compendium and categorized the evaluations based on the rigor of their research design. AYPF also presents a discussion of the challenges of data collection and program evaluation in the education and youth-service fields, along with steps that can be taken to improve evaluation research. The section closes with an explanation of the format used in the program profiles.

Methodology

In spring 2008, AYPF began an extensive search process to identify scientifically rigorous and third-party evaluations to include in this compendium of programs and practices supporting college- and career-readiness for all youth. An extensive literature review was conducted to outline pertinent research and evaluations on educational achievement and attainment gaps, barriers to postsecondary education, secondary school reform initiatives, and emerging approaches to college- and career-readiness for the 21st Century.

To help identify evaluations, AYPF contacted a vast number of universities, research centers, and policy institutes that focus on school improvement, youth development, and college- and career-readiness. AYPF also tapped into its network of experts in the education and youth policy fields, including Achieve, the Alliance for Excellent Education, Education Trust, Jobs for the Future, MDRC, National Association of Secondary School Principals, National Youth Employment Coalition, and Pathways to College. An advisory group of national experts was also convened to help determine the program selection criteria, identify potential evaluations to be included, and contribute to the policy recommendations.

AYPF looked for rigorous, external, or third-party evaluations of programs that aimed to help youth progress along a pathway to postsecondary success, from middle school into college, in accordance with our logic model. Thus, the scope of potential programs for inclusion was quite broad, spanning the fields of comprehensive school reform, career-and-technical education, expanded learning opportunities, college access, dual enrollment, and postsecondary student services. Despite searching for evaluations across a broad spectrum of programs, we found limited numbers of high quality evaluations for various reasons, which are cited below.

The scientific rigor of a program evaluation is primarily determined by its research design and the sample that is used. Studies that use a random assignment research design have long been considered the “gold standard” for high-quality program evaluation. When study participants are randomly assigned to treatment and control groups, all systemic, pre-program differences between the two samples disappear, and any differences in outcomes can be attributed to the impact of the program. Conducting randomized experiments with youth poses particularly challenging ethical issues, however, and is often not feasible. Researchers must be able to ensure that the control group is not denied crucial services or intentionally given an inferior education. A few notable large-scale, random assignment studies have been conducted in situations in which there are many more applicants to a program than available slots, and placement in the program is determined through a lottery process. The Upward Bound and Career

Academies evaluations included in this volume represent the most prominent examples of this type of research, providing strong, causal evidence of the models' effectiveness.

As an alternative to random assignment, many strong evaluations use a quasi-experimental design, with closely matched comparison groups, in order to control for as many initial differences between the program and comparison groups as possible. While strong comparison group evaluations may control for a large number of variables, including participants' gender, race, ethnicity, age, prior academic achievement, family income, and parents' education levels, they still reflect an inherent selection bias. Unmeasurable factors, such as the motivation to enroll in a particular program, may influence the outcomes. However, these studies can demonstrate a very strong association between participation in the program and the outcomes observed, suggesting that the intervention produced a particular effect.

As a result of the evaluation review process, AYPF identified 26 programs for inclusion in the compendium, in two categories. The first category is "Demonstrated Evidence of Effectiveness" and contains 23 programs, and the second category we call "Programs to Watch" and includes 3 programs.

The distinctions between these two categories were developed in consultation with members of the advisory group and an external research consultant and are primarily based upon the strength of the research design. We also considered the program's fit with the compendium's logic model, and an effort was made to include a few programs that showcase diverse activities and that serve different populations of students. In identifying evaluations for the compendium, we sought to include the most recent research available, and the majority of evaluations were released in the last five years. AYPF conducted an internal review of each evaluation, engaged in extended discussions with program directors and researchers, and collected additional data and information on the programs to supplement the material in the evaluations.

Twenty-three evaluations that have a Demonstrated Evidence of Effectiveness are included in this compendium. Of these evaluations, 8 used an experimental, random assignment design, and the remainder used a quasi-experimental design with well-matched comparison groups. These studies used a treatment group, comparison group, and multiple measures to compare quantitative outcomes, such as attendance, test scores, course grades, credits earned, college going-rates, financial aid application rates, school suspension rates, etc. for participants and nonparticipants. Some research designs relied on statistical matching procedures to ensure that their treatment and control groups were equivalent across a large number of variables, and some used particularly large samples.

The Programs to Watch category includes 3 programs that have engaged in comprehensive data collection but with a less rigorous research design. These programs are typically newer or smaller initiatives that have demonstrated a commitment to evaluation and assessment, along with promising early results. These innovative programs offer a strong fit with the AYPF logic model and pose important implications and questions for policy and practice, though these are not the only programs that are doing a good job of serving youth or providing unique services.

We do want to be clear that the term, “Program to Watch,” only applies to the quality of the program’s research base and does not in any way indicate that the program itself is not of high quality.

The initiatives featured in the Programs to Watch group may not yet have a comparative evaluation, meaning that they are not able to demonstrate that the youth would not have achieved the same positive outcomes without the intervention. Some of these programs collected data primarily from qualitative interviews and surveys about participants’ feelings, and some collected data at only one point in time. However, they offer interesting and valuable information about strategies that help young people.

Challenges with Data Collection and Evaluation

There are various valid reasons why there are limited numbers of evidence-based evaluations of programs and practices related to improving college-and-career readiness. Many education and youth-serving programs lack the resources to contract third-party researchers to conduct independent evaluations, and many programs do not budget funding for evaluations. Many programs do not have the capacity to develop or formulate independent research, given pressing time demands and limited staff. Some smaller and newer initiatives may have observed exemplary results, but they are often unable to causally attribute their participants’ success to the intervention because they have not yet undertaken a formal evaluation or have only one or two years’ worth of data, which may not be enough to draw any conclusions.

Many programs are also unable to collect or use the full range of data (qualitative and quantitative) that pertain to participant outcomes. It is usually easier for programs to collect qualitative data, which provide important feedback from participants, and provide an understanding of successful program elements and characteristics. But programs also need to collect quantitative data, which provide more objective indicators of participant outcomes over a period of time. Collecting quantitative data can be time consuming, expensive, and require data systems that track the progress of youth longitudinally, which can present challenges to small or under-financed programs. Another challenge is that some programs do not disaggregate their data based on student demographics such as race and gender, and therefore are unable to determine the impacts on achievement gaps between different groups of students.

The dearth of longitudinal data systems that track students through the transition into postsecondary education and employment also limits the amount of information available. The K-12 and postsecondary education systems operate as separate silos, with little ability to link student records between the two levels. The best-known exception is Florida’s K-20 data warehouse, where all records from the state’s public educational institutions are housed and which features the ability to track individual students through all systems with a unique student identifier. Through the American Recovery and Reinvestment Act (ARRA), the U.S. Department of Education has incentivized all states to demonstrate progress toward establishing data systems tracking students from pre-K to college and careers. In many cases, however, it will be several years before such data is available for longitudinal research.

Programs that strive to prepare students for the workforce face particular challenges in assessing their impact on their desired outcomes. Administrative records seldom link individual youth with future employment outcomes, limiting the data on career outcomes. It can be very difficult to track youth after their relationship with the program ends, and many of these surveys have low response rates. Another challenge is that definitions of participants in specific programs can be inconsistent or unclear. States use different definitions and some databases do not classify students by their high school program, so that identifying students as career-and-technical education (CTE) concentrators, for example, is not possible.

Practitioners and researchers are also limited by the type of outcome indicators and assessments that are available. A large number of the evaluations in this compendium reported data from state assessment test scores, likely because this information is the easiest to obtain and compare. Many of the programs in this volume also promote 21st Century skills, social and emotional development, and academic success behaviors, but they lack valid and reliable assessments to determine whether youth are actually gaining these skills. In the absence of other reliable assessments, programs may track outcomes that are less aligned with what they are hoping to achieve. Fortunately, several national organizations are developing “noncognitive” measures of college-readiness that reflect the nonacademic dimensions of postsecondary success.

Finally, a focus on accountability and quantitative achievement gains in education should not unintentionally lead programs to stop collecting qualitative data. A relatively small number of the evaluations in this compendium used qualitative data to investigate the characteristics of the programs’ implementation that contributed to their effectiveness. AYPF recognizes the importance of collecting this data and encourages programs to increase their efforts and capacity to both collect and analyze both quantitative and qualitative data.

Improving Evaluation Research

Throughout the compendium, we note the limited availability of high quality research on programs supporting college- and career-readiness. This issue hinders improvement and innovation across the education and youth service fields. The lack of data collection and rigorous evaluation limits the knowledge base around effective practices and also constrains the policymaking process by not having sufficient data on which to base key decisions. Because we consider data and evaluation to be so critical to identifying what works for youth, AYPF suggests the following steps be taken to improve educational research:

- A comprehensive, national research agenda on education and youth issues should be developed so as to (a) determine which strategies and policies have resulted in the most benefit, for whom, and at what cost, (b) determine what types of research and evaluation are most useful to policymakers and practitioners, and (c) provide guidance to practitioners on how to initiate and use program evaluation for ongoing program improvement.
- Funders, both public and private, should require and set aside funding for high quality program evaluation as part of any grant and utilize and share findings to improve policy and practices. Funders should also help program providers learn more about why evaluations are important, how they can be used to continuously improve, and how to conduct quality evaluations.

- Disaggregation of data by race, ethnicity, English language proficiency, disability status, gender, and poverty level is critical for researchers, educators, policymakers, families, and the public to create programs that are effective in serving students with special needs and closing achievement gaps.
- Longitudinal data collection that follows students through grades K-12, postsecondary education, and the workplace, across states and across all types of programs, is needed. AYPF commends the states that are moving to create such longitudinal systems. It is particularly important that such data collection initiatives include systems for tracking the long-term labor market outcomes of youth, in addition to their educational attainment.
- Policies should encourage and support the collection of both quantitative and qualitative data. While quantitative data is often the ultimate factor in making decisions, without qualitative data, it is often difficult to understand why a program is effective or successful in serving certain youth.
- Valid and reliable assessments designed to measure the nonacademic elements of college- and career-readiness, including non-cognitive abilities and 21st Century skills, should be developed. The federal government can lead this effort as a way to ensure consistency, reduce duplication of effort, and reduce cost.
- Policymakers should encourage the development and use of program quality indicators as a part of program evaluation to encourage continuous program improvement.

Program Profile Format

AYPF designed this compendium to serve dual purposes: to demonstrate to policymakers the value of programs promoting college- and career-readiness for all youth and the need for policies that facilitate their creation and sustainability, and to provide information to practitioners on best practices in the field. There are 26 profiled programs in this compendium. Each profile is designed to give the reader an understanding of the program, to highlight its results, and to pinpoint the elements that appear to have led to its success.

Each profile of an evaluated program contains:

- An overview of the program
- AYPF's interpretation of the stages of the college- and career-ready logic model targeted by the program
- AYPF's analysis of the elements that contributed to the program's success
- Overview of key findings
- Findings in detail
- Description of the program population and eligibility
- Unique program components
- An overview of the evaluation(s)
- Description of the evaluation population and eligibility
- Information on the evaluation methodology
- Funding sources for both the evaluation and the program, and information about program costs
- AYPF's interpretation of the policy implications of the program and evaluation
- Contact information for both the program and the researcher

Elements of Success

While the programs included in this compendium varied considerably, targeting diverse student populations through a range of learning environments, a number of common themes emerged from these initiatives that may contribute to their effectiveness in improving college- and career-readiness and success. We have identified the following Elements of Success which are derived from the evaluations, as well as from detailed information provided by program leaders and researchers.⁴⁴ The Elements of Success are grouped into two broad categories: Programmatic Elements of Success, which include factors related to the content and interactions that characterize young people's experiences in the programs, and Structural and System-Focused Elements of Success, which include factors related to the context and environment in which the programs operate. Within each of these categories, we have grouped Elements of Success into several thematic sub-categories.

Several recent studies of successful secondary schools and programs serving low-income and minority youth have identified the key factors of "rigor, relevance, and relationships" that distinguish high-performing initiatives and which have been widely touted as the new "3Rs" of effective schools. Many of the evaluations in this compendium support this finding about the "3Rs" of effective schools, but also illuminate some less-frequently cited practices contributing to positive outcomes, such as youth-centered programming and initiatives that develop "college knowledge." We recognize that there are additional elements of program success, such as adequate funding, using data, and measuring program quality that have been identified by other research however, we have only included elements that were specifically identified in the evaluation as important factors related to the effectiveness of the programs.

Programmatic Elements of Success

AYPF's analysis of the evaluations uncovered several programmatic Elements of Success that have been effective in supporting youth's progress on the pathway to college- and career success. These elements reflect the thematic sub-categories of Rigor and Academic Support, Relevance, Relationships, Effective Instruction, College Knowledge and Access, and Youth-Centered Programs.

Descriptions of the themes are provided below, along with a bulleted list of the specific elements of each theme, reflecting the terms used by practitioners and researchers in the field. The discussion of each theme includes references to some of the programs that exemplify these elements in diverse ways.

Rigor and Academic Support

Terms used in the evaluations to describe Rigor and Academic Support include:

- Rigorous curriculum
- Culture of high expectations
- Instruction in academic success behaviors

⁴⁴ This discussion of Elements of Success draws on the 23 programs in the Demonstrated Evidence of Effectiveness category as well as the 3 programs in the Programs to Watch category.

- Increased tutoring and academic support services
- “Accelerated remediation”

Of the 26 programs AYPF reviewed, we found that 18 possessed an Element of Success related to Rigor and Academic Support. In order to build the knowledge base and academic skills necessary for college- and career-success, youth need challenging learning experiences, opportunities to practice academic success behaviors, and support to develop and increase their knowledge. Most of the programs that exemplify these Elements of Success provide a rigorous curriculum and ensure that instructional staff are prepared to support students participating in more demanding classes. KIPP has become well-known for its culture of high expectations and demanding academic program for middle school students, which includes large amounts of homework and reinforces positive academic behavior through a system of incentives and consequences. AVID encourages average and lower-achieving students to participate in advanced, college-preparatory courses, and also includes an elective course that teaches a set of strategies and study techniques that students can apply across the curriculum. Upward Bound and Upward Bound Math Science provide enrichment courses in college-preparatory subjects through intensive residential summer programs.

Several of the programs in this compendium that target lower-performing students emphasize a philosophy of “accelerated remediation,” or even “acceleration instead of remediation.” These programs reflect the theory that students who are under-credited will benefit more from an intensive, challenging program that quickly gets them on track with the courses required for college, rather than placing them in a long-term remedial setting. Early College High Schools allow even low-performing students the chance to earn significant college credits through dual enrollment.

At the college level, the Opening Doors programs at Chaffey College and Kingsborough Community College also provide struggling students or those at risk of college failure with sheltered instruction in academic success behaviors. These “college success” courses focus on topics such as time management and study skills, and the programs also increase participants’ access to the colleges’ tutoring programs and resource centers.

Relevance

Terms used in the evaluations that relate to Relevance include:

- Work-based learning
- Project-based learning
- Applied curriculum
- Innovative uses of technology
- Financial incentives
- Connections to employment, internships, service learning

Nine program evaluations exemplified an Element of Success related to Relevance. Learning opportunities that offer clear, real-world applications allow youth to engage more deeply in their

education, develop important 21st Century skills, enhance their technical abilities, and reinforce and supplement theoretical knowledge. Relevant programming can also engage students at risk of dropping out of high school by better tailoring their education and out-of-school activities to their interests, needs, and future economic advancement. The concept of relevance can be applied to activities that make academics more meaningful, as well as programs that are relevant to the non-academic aspects of young people's lives. The evaluations in the compendium demonstrate there are a variety of ways to provide relevant learning opportunities in multiple settings and contexts, and these programs have academic, career-related, and developmental benefits.

Academic relevance is enhanced by school-based initiatives that illuminate the real-world importance of the subjects learned in high school. Career Academies provide an example of how schools can be restructured to emphasize the connections between the curriculum and students' long-term goals. Students choose to belong to an academy focused on their preferred career field, and they take an integrated academic and vocational program of study based on the context of the career theme. Math-in-CTE builds academic skills through contextual examples arising from CTE exercises.

"Life relevance" is observed in programs that take place beyond the school day or outside of the core curriculum that provide young people with opportunities to gain work experience, explore a variety of activities and career fields, and serve their communities. After School Matters emphasizes workforce and youth development, providing low-income high school students with paid apprenticeships in the arts, sports, technology, and communications. Hillside Work-Scholarship Connection places youth at risk of dropping out in part-time jobs with local employers that have committed to mentoring participants, and the students who hold jobs have higher grades and graduation rates. The financial incentives provided by such programs help to motivate students to participate regularly in these structured expanded learning opportunities and allow students to enjoy the tangible rewards of their efforts. Citizen Schools incorporates "community exploration" through the study of social justice issues, neighborhood visits, and cultural fieldtrips.

National Guard Youth ChalleNGe incorporates a variety of activities to build relevance for formerly disengaged youth, with program components ranging from physical fitness and health to community service and life-skills training. As an elective, school-based program, Virtual Enterprise encourages entrepreneurship and builds teamwork and other 21st Century skills by using technology to allow students to create and manage a virtual firm.

Relationships

Terms used in the evaluations that relate to Relationships include:

- Caring mentors (peer and adult)
- Personal relationships
- Smaller learning communities
- Advisory/advocacy systems
- Teambuilding

- Single-sex learning environment
- Residential program
- Family involvement

Relationships with caring, competent adults and supportive peer networks are critical to youth engagement in education, and they facilitate the positive youth development opportunities necessary for the successful transitions through middle and high school and into postsecondary education. The personalization of the school or program environment serves to motivate students, allows for earlier identification of problems, and targeting support for social or academic challenges, provides positive adult role models, and facilitates the relationships between school personnel and the students' families and caregivers. Supportive environments also facilitate cooperative and positive peer relationships, and young adult mentors from similar communities and backgrounds can serve as particularly strong examples of postsecondary success. Twenty program evaluations exemplified Elements of Success related to Relationships.

Due to the accumulation of evidence supporting the benefits of personalized school environments, smaller learning communities (SLCs) have been incorporated as a common element of many comprehensive school reform models, including First Things First and Talent Development, and many new, small schools have intentionally limited enrollment to a few hundred students per grade, such as KIPP, Early College High Schools, and Diploma Plus schools. First Things First features a family advocate system, and Project GRAD includes an annual Walk for Success, in which school staff visit the home of every 9th grader to introduce the model and the scholarship opportunity and encourage parents' commitment to the program.

The single-sex learning environment of the Young Women's Leadership Charter School is intended to build self-esteem and leadership, providing a unique opportunity for girls who are predominately from Latino and African American communities to focus on science and math in a supportive environment. National Guard Youth ChalleNGe also separates male and female participants, and the residential experience strives to remove youth from societal distractions and negative influences. Acknowledging the importance of peer relationships, ChalleNGe also places a particularly strong emphasis on team-building through its structure of "platoons" and "squads."

Positive relationships also have a powerful impact on young peoples' goal-setting and planning for life beyond high school, and many expanded learning opportunities and alternative education programs facilitate these important connections. Admission Possible uses a service corps structure to employ recent college graduates as mentors and coaches for small groups of students. National Guard Youth ChalleNGe includes a structured community mentoring program, in order to help youth maintain their focus on the goals that they set and positive behaviors that they adopted during the Residential Phase of the program.

Personalization also contributes to student success at the postsecondary level. Digital Bridge Academy and the Opening Doors Learning Communities program at Kingsborough Community College represent

cohort models that promote teambuilding, cooperative learning, and personal relationships with college faculty and staff.

Effective Instruction

Terms used in the evaluations related to Effective Instruction include:

- Embedded professional development
- Team-teaching
- Professional learning communities
- Common planning time
- Low student-teacher ratios

Seven programs in the compendium emphasized an Element of Success related to Effective Instruction. Support for effective teaching, ongoing professional growth for educators, and collaboration among teachers are critical to the success of all school reform models, new school initiatives, and college readiness programs. Implementing new instructional methods, changing school culture, and reorganizing school structures and schedules all depend on professional development and faculty support. Teachers need to have explicit opportunities to learn from their colleagues and be allotted time to work together to make the curriculum more coherent for students. Lower student-teacher ratios also facilitate effective teaching by enhancing classroom management and personalization, and allowing teachers to differentiate instruction.

Talent Development uses professional development to ensure that teachers are equipped to implement and maintain its reforms, with a particular emphasis on effective teaching and student support during the 9th grade. Teachers in the Ninth Grade Success Academies receive extensive course-specific professional development and weekly curriculum coaching, and they have the opportunity to attend annual conferences for all schools in the network. AVID provides Summer Institutes for teacher and administrator teams from each school, and participants are trained to lead professional development on AVID's philosophy and pedagogical techniques to their entire school community throughout the year. Math-in-CTE relies on summer professional development allowing pairs of math and CTE teachers to jointly develop CTE lesson plans with applied math content, as well as ongoing common planning time for the math teachers to support their CTE colleagues. First Things First also incorporates common planning time for SLC teams, and strives to limit student-teacher ratios to 15:1 for English and math classes. Upward Bound Math-Science offers a lower student-staff ratio than other federal college access programs.

College Knowledge and Access

Terms used in the evaluations related to College Knowledge and Access include:

- Early college exposure
- Physical program location on a college campus
- Increased college counseling

- Scholarships
- Financial aid assistance

Youth need early exposure to the world of college, in order to develop a college-going identity and understand how the structures, opportunities, and demands of higher education differ from secondary school. It is also critical for young people to be able to turn to adults who can answer their questions about college, guide them through the admissions process, and help them find ways to finance their education. Twelve programs in the compendium possessed an Element of Success related to College Knowledge and Access.

As exemplary college access initiatives, Admission Possible provides highly personalized college counseling and assistance with test preparation and applications, and Talent Search programs offer workshops on financial aid and obtaining scholarships. Washington State Achievers provides a strong example of a program that includes the opportunity to earn a full college scholarship.

Several of the programs in the compendium acknowledge the importance of starting as early as middle school to develop college knowledge. GEAR UP features college campus visits beginning in the 7th grade, and Citizen Schools incorporates college tours and early college information into its 8th Grade Academy. KIPP creates a college-going culture by decorating their schools with college banners and paraphernalia.

At the high school level, a number of programs partner with colleges or universities to expose students to college coursework and orient them to the structure and expectations of these classes. Students in Florida and New York City take dual enrollment courses, allowing them to simultaneously earn high school and college credit. Early College High Schools offer students from underrepresented groups the chance to earn an Associate's degree or equivalent college credit while still in high school. Diploma Plus offers dual enrollment pathways to connect former high school dropouts with postsecondary education. Some programs provide a particularly authentic college experience. The Upward Bound programs feature residential summer learning experiences, in which students live in college dorms and take classes from college faculty. The location of an Early College High School on a college campus enhances students' academic outcomes.

Youth-Centered Programs

Terms used in the evaluations related to Youth-Centered Programs include:

- Comprehensive social support services
- Differentiated instruction and supports
- Youth voice
- Cultural/community relevance
- Civic engagement

Programs should acknowledge their participants' unique assets and backgrounds, as well as the many academic and out-of-school factors influencing each student's performance. Programs that are relevant to young peoples' cultures and communities motivate youth and build self-esteem. It is also important

for older youth to be allowed to make choices and to feel that they have a voice in the leadership and decision-making processes of the schools and programs that they attend, in order to support their increasing need for independence and self-sufficiency. Ten evaluations demonstrated an Element of Success related to Youth-Centered Programs.

Communities in Schools provides a strong example of an integrated student services model that connects students to a wide range of psycho-social, health, and academic service providers, based upon their individual needs. The entire student body benefits from a range of prevention and support services, such as afterschool programs and community health centers, and students with particular risk factors receive sustained services such as substance abuse interventions and mental health counseling.

The Young Women's Leadership Charter School differentiates instruction and remediation through its proficiency-based assessment system, and the school encourages youth voice through a leadership development recognition program at the middle school level. Diploma Plus provides opportunities for increasing responsibilities and autonomy as students move through the programs' phases, with an emphasis on civic engagement. Each program site involves a group of student leaders in school governance, and students in the Plus Phase design and complete a community action project.

At the postsecondary level, Digital Bridge Academy features a project-based course in which participants conduct research on community needs and social justice issues, drawing on their own life experiences. Another core course in the Bridge Semester, the Team Self-Management Course, strengthens decision-making skills and fosters personal responsibility.

Structural and System-Focused Elements of Success

Effective programs serving youth at all levels of the pathway to college- and career success benefit from an ongoing focus on building capacity, creating the most effective structures possible, and leveraging the resources of multiple institutions and sectors. AYPF's analysis of the program evaluations found that the themes of Leadership and Autonomy, Effective Assessment and Use of Data, Strategic Use of Time, and Partnerships and Cross-Systems Collaboration recurred as dominant elements of these programs.

Leadership and Autonomy

Terms used in the evaluations that relate to Leadership and Autonomy include:

- Strong/effective leadership of reform effort
- Extensive selection and training of leaders
- School-level autonomy
- District-wide/community-wide commitment to reform
- Active and long-term commitment by technical assistance providers

The implementation of systemic reforms that promote college- and career-readiness requires effective leadership. Several of the evaluations speak to the importance of strong and committed leaders at the

school and district levels. Some program models specifically aim to influence school governance or to impact the selection and training of leaders, while others involve a particularly active role of technical assistance providers. Different school systems and models award leaders varying degrees of authority over human resources, budgets, scheduling, and instruction, and charter schools typically provide principals with considerable autonomy. These diverse programs demonstrate the potential of effective leaders to act as change agents, allowing youth-serving institutions to rethink the best ways to ensure college-and career-readiness. Nine evaluations in the compendium emphasized an Element of Success related to Leadership and Autonomy.

The KIPP model exemplifies the considerable autonomy of leaders of new charter schools and incorporates an extensive selection and professional development process for these administrators. New principals participate in a one-year fellowship program which involves business and education courses at Stanford University as well as a long-term residency in which they shadow the leader of a high-performing KIPP school. Once leaders complete this process, they are fully responsible for hiring staff and establishing the curriculum for their schools. Principals of new schools may be able to avoid some of the internal roadblocks to change affecting existing schools, by bringing on a team that is committed to the same vision and structure. As an example of a new public school that is allowed an extra degree of autonomy, Baltimore Talent Development High School is one of the city's "innovation high schools," and the principal has authority over staff selection and professional development.

The First Things First evaluation specifically attributed the model's high level of success in Kansas City, Kansas to the commitment of district leaders as well as the level of involvement of outside technical assistance. Kansas City leaders maintained consistent, long-term support for First Things First as the district-wide reform strategy, which translated into the buy-in of principals at the school level. The Institute for Research and Reform in Education (IRRE) provided constant and intensive technical assistance during the early implementation at this site, though they were not able to serve such a hands-on role at each of the expansion sites, as their efforts were divided across multiple regions.

Effective Assessment and Use of Data

Terms used in the evaluations related to Effective Assessment and Use of Data include:

- Alternative assessments
- Performance-based assessments
- Continuous opportunities for student improvement
- Data-driven instruction
- Formative evaluation

Five program evaluations explicitly referenced Effective Assessment and Use of Data. Effective programs recognize the potential power of data and assessment to both guide instruction and ensure high-quality implementation. Innovative approaches to assessing student achievement have the potential to recognize skills, elements of knowledge, and indicators of improvement that are often missed by traditional assessment systems. Advancements in data collection and analysis offer teachers

opportunities to monitor student progress on an ongoing basis, and to target instruction and interventions to areas in which students are struggling. Data also provide a common language for all stakeholders, including teachers, principals, district leaders, students, and parents, to accurately and honestly assess areas that need improvement and observe achievement gaps. Many school reform efforts have focused on enhancing the ability to link outcome data to teacher and school practices, allowing educators to gain a better understanding of predictors of student success. Formative evaluations also allow programs to continuously refine and improve their design. Program staff should be trained to reflect on the findings of such evaluations and implement changes and improvements based on the findings.

The Young Women's Leadership Charter School features an alternative assessment and grading system that is based upon students' mastery of the specific learning objectives of each course. Instead of letter grades, students receive ratings on their proficiency in each objective, and they have the opportunity to change their ratings based on additional work and remediation in a particular area. This system aims to hold students accountable for demonstrating proficiency in all aspects of each subject and reward improvement. The school's EASE web interface allows teachers, students, and parents to receive real-time data on a student's performance in current classes and prior classes and access an individualized listing of areas needing improvement. Diploma Plus also emphasizes a competency-based approach to promotion, as students progress through phases instead of grade levels, and complete portfolios and final projects to demonstrate their readiness to progress to the next phase.

Combining data on student performance with a focus on organizational improvement, First Things First schools utilize a shared data management and analysis software program to evaluate each site's progress toward implementation of the model's core components. The program allows teachers and principals to link data from classroom observations to student outcome data, in order to examine the impact of instructional changes.

The KIPP Foundation collects, analyzes, and publishes a large amount of internal data from all KIPP schools, through its annual KIPP Report Card, and a new initiative tracks both academic and nonacademic indicators of school health to contributing practices in teaching and leading. As an example of a program that has demonstrated a strong commitment to both formative and summative evaluation, Communities in Schools (CIS) launched a network-wide, multi-level, and mixed method evaluation that attempted to examine the model's impact as well as identify areas that could be improved. They contracted ICF International to develop the CIS National Evaluation design to address a complex set of questions at the organizational, school, and student levels, including a case study component that provided an in-depth look at promising practices at schools that were considered to be highly implementing the CIS Model. The large amount of data collected through this evaluation allows CIS to make evidence-based decisions regarding their future direction and strategy.

Strategic Use of Time

Terms used in the evaluations related to Strategic Use of Time include:

- Block scheduling

- Alternative scheduling
- Longer school day and year
- Expanded learning opportunities (ELOs)

Eleven program evaluations referenced Elements of Success related to the Strategic Use of Time. Effective programs rely on structural changes that include reorganizing and expanding the time that young people spend in structured learning environments, and they acknowledge the importance of the activities that young people engage in beyond the hours of the traditional school day. Many school reform models and programs call into question the effectiveness of the traditional high school schedule that involves 7 or 8 periods, proposing that many students need additional time in core subjects, such as math and English. Longer periods can also be used to increase opportunities for project-based learning and the real-world application of CTE skills. Expanding the amount of time that students remain with a particular group of teachers facilitates continuity of care and personalizes the school environment. Many programs and school models provide additional academic support in the afterschool hours and on weekends, but expanded learning opportunities also have the potential to provide participants with important youth development experiences, such as internships, employment, civic engagement and creative activities in the arts.

Both Talent Development and First Things First use block scheduling to provide students with double doses (typically 90-minute blocks) of core academic subjects. This structure allows Talent Development to offer a full year's worth of remedial coursework during the first semester, followed by a year's worth of grade-level, college preparatory courses in the second semester. Talent Development also offers an alternative schedule for its dropout recovery program, the Twilight Academy, with classes typically offered later in the day to accommodate students' work and personal schedules and make learning more accessible to youth.

A defining characteristic of the KIPP model is an extended school day and year. The average school day lasts approximately 9 hours, and all schools in the network provide half-day Saturday school on alternate weekends and at least three weeks of mandatory summer school. The extra time is viewed as a critical strategy for preparing students for the rigor of college-preparatory, high-quality high schools. Communities in Schools, GEAR UP, and Young Women's Leadership Charter School are examples of school-based initiatives that also include academic support programs and college preparatory activities in the out-of-school-time hours.

Expanded learning opportunities, such as Afterschool Matters and Citizen Schools, use the out-of-school hours to allow youth to explore unique learning environments beyond the school walls and develop 21st Century skills not typically emphasized in academic courses. Both of these programs rely on partnerships with the public schools, reflecting systems in which ELOs and school-based initiatives are mutually supportive and each provides a unique set of educational experiences.

Partnerships and Cross-Systems Collaboration

Terms used in the evaluations related to Partnerships and Cross-Systems Collaboration include:

- Institutional and community partnerships
- Secondary-postsecondary partnerships
- Employer partnerships
- Alignment between high school and postsecondary requirements
- Explicit college pathways for CTE students

Thirteen evaluations directly mention an Element of Success related to Partnerships and Cross-Systems Collaboration. Throughout the evaluations in the compendium, collaboration emerges as a key ingredient for programs that aim to move students along the pathway to college- and career-readiness. Effective partnerships between educational institutions and across sectors help young people bridge the gaps between the vastly different worlds of middle school, high school, postsecondary education, and the workplace. Colleges and universities play a key role in such initiatives, as their participation helps the K-12 system to better align their curriculum with the level of preparation needed for success in higher education, provide accurate information about the admissions and financial aid process, and offer authentic opportunities for students to develop college knowledge. Collaboration with other youth- and family-serving institutions in the community also allows programs to leverage existing resources and promote a continuum of care for young people, as demonstrated by the Communities in Schools model.

GEAR UP incentivizes collaboration by providing grants to partnerships between local school districts, institutions of higher education, and at least two other organizations, which include community organizations and businesses. College Now, the New York City program featured in the dual enrollment evaluation, reflects extensive collaboration between the New York City Public Schools and the City University of New York (CUNY). Most College Now classes are taught on high school campuses by faculty members who have been certified as adjunct instructors by CUNY. Florida exemplifies a state that has made significant progress in aligning high school and postsecondary education curricula, through the creation of a common course numbering system that identifies over 500 courses that can be used for dual (high school and college) credit in public institutions, providing a clear signal to students and educators about the level of rigor that constitutes college work.

Employer partnerships are critical to ensuring that high school courses with a career emphasis offer a curriculum that is relevant to employer and labor market needs, and they also enable programs to offer work-based learning opportunities. Career Academies depend on employer partnerships as crucial components, and they often incorporate job-shadowing and apprenticeships in local businesses. Virtual Enterprise benefits from the commitment of leading corporations in the financial sector, who host business competitions and provide students with adult role models and internship opportunities. Business and community partnerships also offer fundamental contributions to ELOs. Afterschool Matters relies on partnerships between the City of Chicago, the Chicago Public Schools, the parks and public libraries departments, and other community organizations that host apprenticeship opportunities.

Closing

Despite the breadth and diversity of programs supporting college- and career-readiness and success, careful analysis demonstrates that successful programs share a number of programmatic and structural

features. The profiled programs exemplify strategically designed approaches to providing rigorous, supportive, and relevant learning environments that are rich in positive relationships, applicable college knowledge, and youth-centered programming. They also represent structural and systemic innovations, as many of these programs rethink traditional approaches to instruction, assessment, scheduling and the use of time, and they benefit from strong partnerships and effective leadership.

Part II: Program Profiles

Program profiles are not included in this version due to their length. Please see the separate document, “Sample Program Profiles,” for examples of the structure and content of the 26 program profiles that will appear in this section.

The included programs will be:

Demonstrated Evidence of Effectiveness:

- 1) After School Matters (Chicago)
- 2) Advancement Via Individual Determination (AVID; Evaluations in TX)
- 3) Career Academies (National)
- 4) Communities in Schools (National)
- 5) Citizen Schools (Evaluation in Boston)
- 6) Digital Bridge Academy (Santa Cruz County, CA)
- 7) Diploma Plus (Evaluations in NY, MA, RI, and CA)
- 8) Dual Enrollment in Two States (Florida and New York, NY)
- 9) Early College High Schools (National)
- 10) Enhanced Math in Career and Technical Education (National)
- 11) First Things First (KS, MO, TX, and MS)
- 12) GEAR UP (National)
- 13) Hillside Work-Scholarship Collaborative (Rochester, NY)
- 14) KIPP Schools (Evaluations in San Francisco, Baltimore, and Memphis)
- 15) National Guard Youth Challenge (National)
- 16) Opening Doors—Kingsborough Community College (Brooklyn, NY)
- 17) Opening Doors and Enhanced Opening Doors—Chaffey College (Rancho Cucamonga, CA)
- 18) Project GRAD (Evaluations in Houston, Atlanta and Columbus, OH)
- 19) Talent Development High School (Evaluations in Baltimore, Philadelphia, and Newark, NJ)
- 20) Talent Search (Evaluations in TX, IN, and FL)
- 21) Upward Bound (National)
- 22) Upward Bound Math-Science (National)
- 23) Washington State Achievers (WA)

Programs to Watch:

- 1) Admission Possible (Minneapolis/ St. Paul, MN)
- 2) Virtual Enterprise Program (New York City)
- 3) Young Women’s Leadership Charter School (Chicago)

Part III

Participant Outcomes

The programs included in this compendium have a positive impact on young people’s preparation for postsecondary success at various stages of their educational, professional, and personal development. Broadly speaking, these programs increase the number of young people who graduate from high school prepared to make informed decisions about education and training and ready to succeed in college and careers. Participants in these programs are more likely to be engaged in school, take advanced courses, apply for financial aid, enroll in college, earn postsecondary degrees, and find employment. The programs that are highlighted in this publication help demonstrate to policymakers and the general public that there are proven ways to help all youth become college- and career-ready. This section summarizes the range and patterns of the outcomes observed in the 23 evaluations that met AYPF’s criteria for Demonstrated Evidence of Effectiveness.⁴⁵

These programs increase the number of young people who graduate from high school prepared to make informed decisions about education and training and ready to succeed in college and careers.

Programs described in this compendium measure various types of outcomes across the middle and high school levels, as well as into postsecondary education and careers. For example, many programs serving middle and high school students measure outcomes such as attendance, course passing rates, achievement test scores, on-time promotion to the next grade, and high school graduation. Some of the evaluations in this compendium also analyze findings related to participants’ planning for postsecondary education, including changes in educational aspirations, the acquisition of “college knowledge,” and applications for financial aid. Personal development and wellbeing are sometimes measured at the secondary level using indicators for student engagement, health and wellness, and feelings of self-efficacy. A few of the evaluations of high school-level programs also track the success of former participants into postsecondary education and careers.

Programs serving students in postsecondary education strive to impact academic outcomes, career-related outcomes, and personal development and wellbeing outcomes. Commonly measured outcomes include enrollment in postsecondary education, persistence, credit accrual, and degree completion; employment rates and earnings; and academic self-concept and student engagement.

Following the logic model, the long-term outcomes of effective college- and career- readiness initiatives are career success, the capacity for lifelong learning, and civic engagement. Only one evaluation in the compendium, Career Academies, tracked youth outcomes into the phase of long-term outcomes by

⁴⁵ The outcomes of the three programs in the Programs to Watch category are not included in this discussion, as these programs have not yet been evaluated through external, comparative studies.

examining career success eight years after expected high school graduation. This evaluation also measured personal development and wellbeing indicators pertinent to early adulthood, such as independent family formation.

The majority of findings in these evaluations were observed through quantitative data analysis of indicators such as attendance rates, test scores, and graduation rates. Several studies also used student surveys to collect quantitative data on more subjective outcomes, such as educational aspirations. Qualitative data sources included interviews and focus groups designed to assess program implementation and school climate.

The most common outcomes measured in the compendium include Academic Findings at the Secondary Level, Findings Related to Planning for Postsecondary Success, College-Level Findings, Career-Related Findings, and Youth Development Findings. These categories are discussed in greater detail below and provide further evidence of the valuable role that such interventions play in helping all young people be prepared with the education, training, skills, knowledge, and developmental competencies necessary for long-term success. *For an overview of the different types of outcomes demonstrated by each of the programs, see Table of Demonstrated Positive Outcomes on the following page.*

Table of Demonstrated Positive Outcomes—Overall Findings¹

| Program | Academic Findings-Secondary Level | Findings Related to Planning for Postsecondary Education | Postsecondary Academic Findings | Career-Related Findings | Personal Development & Wellbeing Findings |
|--------------------------------------|-----------------------------------|--|---------------------------------|-------------------------|---|
| After School Matters | X | | | | |
| AVID | X | X | | | |
| Career Academies | X | | | X | X |
| CIS | X | | | | |
| Citizen Schools | X | | | | X |
| Digital Bridge Academy | | | X | | X |
| Diploma Plus | X | | | | X |
| Dual Enrollment in FL and NYC | X | | X | | |
| Early College High School | X | X | | | X |
| Enhanced Math in CTE | X | | | | |
| First Things First | X | | | | X |
| GEAR UP | X | X | | | |
| Hillside Work-Scholarship Connection | X | | | | |
| KIPP Schools | X | | | | X |
| National Guard Youth Challenge | X | | X | X | X |
| Opening Doors-KCC | | | X | | X |
| Opening Doors-Chaffey | | | X | | |
| Project GRAD | X | | | | |
| Talent Development High School | X | | | | |
| Talent Search | | X | X | | |
| Upward Bound | X | X | X | X | |
| Upward Bound Math-Science | X | | X | | |
| Washington State Achievers | X | | | | |

¹ The 23 programs with Demonstrated Evidence of Effectiveness are included.

Academic Findings at Secondary Level

The most commonly measured and observed findings in the evaluations included in this compendium were academic outcomes in middle or high school. Overall, 20 evaluations measured academic outcomes at the secondary level, and all 20 demonstrated evidence of effectiveness. *For a detailed table of the various types of academic findings at the secondary level demonstrated by the different programs, see the Table of Disaggregated Academic Findings, following this section.*

Eleven of these programs increased high school graduation rates or rates of GED attainment or reduced the number of students dropping out of school. These programs run the gamut from comprehensive school reform models to out-of-school-time programs to dual enrollment opportunities. For example, First Things First was associated with a large increase in graduation rates in Kansas City, Kansas, and schools implementing Communities in Schools were more successful at reducing their dropout rates than comparison schools. Nine of the programs improved achievement test scores; KIPP schools were particularly successful in raising middle school math performance, and AVID students outperformed their peers in high school reading and math. Eight programs increased attendance rates, including After School Matters and Talent Development.

Six evaluations, including Citizen Schools, Diploma Plus, and Talent Development, found that the programs increased students' likelihood of passing their classes and end-of-course exams. Hillside Work-Scholarship Collaborative (HW-SC), UBMS, and Citizen Schools were associated with improvements in student grades. Many of the evaluations also measured the programs' impacts on steps that are considered part of a college-preparatory track. Seven evaluations found an increase in the number of students completing a core academic curriculum, including Project GRAD and Washington State Achievers. The evaluations of Early College High Schools, GEAR UP, Upward Bound, and AVID demonstrated that participants increased their likelihood of enrolling in, or passing, advanced courses. Finally, AVID and Talent Search were associated with higher rates of participation in SAT, ACT, IB, or AP exams.⁴⁶

Findings Related to Planning for Postsecondary Education

Many of the programs in the compendium aimed to increase postsecondary access, and 5 evaluations specifically examined behaviors and contextual knowledge related to planning for postsecondary education. The federal TRIO programs, Talent Search and Upward Bound, were both associated with higher rates of application for financial aid, which is a particularly important precursor to college enrollment for low-income students. Several programs were designed to provide information about the college planning and admissions processes, particularly for students from underrepresented groups, and the evaluations of AVID and GEAR UP measured the attainment of college knowledge and demonstrated effectiveness in this area. GEAR UP was also associated with an increase in parents' college knowledge

⁴⁶ Washington State Achievers was also associated with higher rates of SAT and ACT test-taking, but the findings were not statistically significant.

and participation in the college planning process. Finally, Early College High Schools were found to raise young people's educational aspirations.

Academic Findings at Postsecondary Level

Overall, 8 evaluations measured college-level academic outcomes, including enrollment, persistence, grades, credit accumulation, and degree completion, and 7 demonstrated a positive impact. Six of the interventions targeting students at the high school level ultimately increased college enrollment rates, including the federal TRIO programs, dual enrollment, Washington State Achievers, and National Guard Youth ChalleNGe. Several of these evaluations were able to differentiate findings based on the type of postsecondary institution attended and the type of degree pursued; the Upward Bound evaluations found an increased likelihood of enrollment in selective colleges and universities. Participants in Upward Bound Math Science (UBMS) and dual enrollment in Florida and New York increased their likelihood of pursuing a bachelor's degree.

One college-level intervention, Opening Doors at Kingsborough Community College, accelerated the rate at which students passed placement exams and moved beyond remedial-level coursework. The Opening Doors programs, Digital Bridge Academy, dual enrollment, and Talent Search had a positive impact on college grades and the accrual of college credits. Interestingly, the evaluations of UBMS and dual enrollment in Florida and New York found that program participants were more likely to pursue a field that was related to their high school coursework. Opening Doors at Chaffey Community College demonstrated success in moving struggling students off of probation. Of the three evaluations that were able to track study participants through college degree completion, 2 (Upward Bound and Talent Search) had a significant, positive impact.

Career-Related Findings

Only four evaluations measured career-related outcomes, and three demonstrated statistically significant impacts in this area.⁴⁷ Both Career Academies and National Guard Youth ChalleNGe increased participants' employment rates, measured after high school graduation and after completion of an intensive dropout recovery program, respectively. The Career Academies study also demonstrated long-term, positive effects on participants' earnings and the number of months and hours that young people worked, and found that participants were more likely to be employed in a field related to their course of study in high school. Upward Bound increased participants' likelihood of earning a vocational certificate or industry credential.

Findings Related to Personal Development and Wellbeing

Nine evaluations measured outcomes related to personal development and wellbeing at either at the secondary or postsecondary level, and all 9 demonstrated positive outcomes on at least one indicator. Positive impacts at the secondary level ranged from increased leadership activities and recognition for

⁴⁷ The Math-in-CTE evaluation found a positive impact on students' scores on tests of applied mathematics, but the result was not statistically significant.

success (Career Academies) to improved health and wellness (National Guard Youth ChalleNGe). Two programs were found to reduce participants' engagement in risky behaviors, as Citizen Schools participants decreased their likelihood of being suspended and National Guard Youth ChalleNGe participants decreased their incidence of arrests.

Five evaluations used various indicators to measure student engagement, interest, effort, and perceptions of the school environment at both the high school and college levels, and all demonstrated positive results. Diploma Plus students expressed greater interest and effort in their classes, and felt safer and more supported than at their previous schools. First Things First and KIPP also had a positive impact on students' feelings of support from their teachers. Early College High School students reported their peers were less likely to engage in disruptive behavior. At the postsecondary level, Opening Doors at Kingsborough Community College increased students' participation and engagement in their classes, as well as their feelings of integration into the college community.

Several programs targeted self-efficacy and academic self-concept as important personal qualities for college- and career-readiness and postsecondary success, and the evaluations of Early College High School, Digital Bridge, and National Guard Youth ChalleNGe demonstrated positive impacts in these areas. Career Academies increased former participants' rates of custodial parenting, living with a spouse or partner, and establishing independent households, instead of living with their parents, by 8 years after their expected high school graduation.

Findings Related to Participation Intensity and Duration

A number of the evaluations included in the compendium examined the importance of the frequency and length of time that youth participated in the programs, or the number of courses that they completed, in order to determine if larger doses of the program led to stronger effects. Overall, 6 evaluations found that increased participation did in fact lead to greater outcomes. For example, students who participated in Upward Bound and Upward Bound Math-Science for an additional year greatly increased their likelihood of enrolling in postsecondary education, and those who took more than one College Now course had higher college grades than those who enrolled in only one course. The Citizen Schools evaluation found that regular program attendance in middle school had an effect on academic outcomes and suspension rates that lasted into high school. Program completion also appears to make a difference. Students who stayed in Upward Bound through graduation were more likely to enroll in a 4-year college, and more likely to complete a postsecondary degree.

Conclusion

The included evaluations demonstrate that there are numerous ways to significantly improve young people's chances of achieving their goals, through high-quality programs designed to enhance their college- and career-readiness and success. While interventions at different stages of the educational pipeline target varying short-term and intermediate-term outcomes, success at each level brings students one step closer to the finish line.

The array of evaluation outcomes were grouped into five overarching categories: academic findings at the secondary level, planning for postsecondary education, academic findings at the postsecondary level, career-related findings, and findings related to personal development and wellbeing. Of the 23 evaluations with Demonstrated Evidence of Effectiveness in the compendium, 20 demonstrated success in academic indicators at the secondary level, five demonstrated success in indicators of planning for postsecondary education, seven demonstrated success in academic indicators at the postsecondary level, three demonstrated success in career-related indicators, and nine demonstrated success in youth development indicators. When the evaluations were able to track participants' success at both the high school and college levels, they all demonstrated a lasting, positive impact on participants' academic or career-related outcomes, which further supports the claim that early and targeted interventions can be linked to lifelong benefits. Moreover, the more students participate in these effective programs, the greater the gains that they receive.

Table of Disaggregated Academic Findings—Secondary Level:

| Program | Attendance | Graduation Rates, HS Diploma Rates or Reduced Dropout | Completing/ Being On-track for a Core Academic Curriculum | Course-Passing Rates | Achievement Test Scores | Enrollment In/ Passing Advanced Courses | Secondary school grades | On-Time Promotion | Participation in SAT, ACT, AP or IB Exams |
|--------------------------------------|------------|---|---|----------------------|-------------------------|---|-------------------------|-------------------|---|
| After School Matters | X | X | | X | | | | | |
| AVID | | | X | X | X | X | | | X |
| Career Academies | | X | X | | | | | | |
| CIS | X | X | | | X | | | | |
| Citizen Schools | X | | | X | X | | X | X | |
| Diploma Plus | | X | | X | | | | | |
| Dual Enrollment in FL and NYC | | X | | | | | | | |
| Early College High School | X | X | | | X | X | | | |
| Enhanced Math in CTE | | | | | X | | | | |
| First Things First | X | | X | | X | | | | |
| GEAR UP | | | | | | X | | | |
| Hillside Work-Scholarship Connection | | X | | | | | X | | |
| KIPP Schools | X | | | | X | | | | |
| National Guard Youth Challenge | | X | | | | | | | |
| Project GRAD | X | | X | | X | | | X | |
| Talent Development | X | X | X | X | X | | | X | |
| Talent Search | | X | | | | | | | X |
| Upward Bound | | | X | | | X | | | |
| Upward Bound Math-Science | | | X | | | | X | | |
| Washington State Achievers | | | X | | | | | | X |

Recommendations

Preparing students to be ready for and successful in college and careers and civic engagement is a complex undertaking that requires many steps and supportive inputs over several years. It is not a one-time event and could perhaps be described as a “messy” process, as the path to progression is not always clear or direct. There are many factors that contribute to a young person’s readiness and success in college and careers, including their skill and knowledge level, their ability to set goals and plan for the future, and their personal development and wellbeing. For students that naturally have high levels of these skills and abilities (because of family situation, educational background, and resilience, for example), the path to college and careers might be smooth and direct. But for students that lack the academic standing, social capital, and support systems, finding the route to college and a good career can seem an overwhelming task.

Many of the programs highlighted in this publication recognize the multiple barriers and difficulties that many students face as they move toward adulthood, and they are designed to provide assistance across a spectrum of needs to help young people advance. Most of the programs in the compendium provide supports in more than one area and many of them are comprehensive programs that provide academic, planning, and personal development supports. These programs help demonstrate that a comprehensive approach to preparing young people is important, and that a focus on multiple outcome indicators is important. They understand that success is dependent on many variables, and if one variable is shaky (e.g. not having money to pay for college), the progression to college and careers can be stopped cold.

A review of the programs in this compendium provides important policy guidance on how to structure interventions to help young people be college- and career-ready. We first provide some “Big Picture” recommendations about the purpose, goal, and broad design of college- and career-ready efforts. We then provide more specific policy recommendations that track the Elements of Success that were identified earlier.

Big Picture Recommendations (use a different section title?)

Policymakers should set clear goals for programs that prepare young people for their future, and we advocate that the goals should be career success, civic engagement, and capacity for lifelong learning. This is what we want our children and youth to be able to do: be successful in one or many careers that pay a family-sustaining wage over their lifetime, be fully engaged in the democratic process and the life of their communities; and know how to learn and appreciate the value of lifelong learning. We already know that getting all students college- and career-ready is an enormous task and commitment. But if we limit the goal to readiness only, we lose sight of the ultimate outcome we are looking for. As policymakers consider designing college- and career-ready initiatives, we would urge them to push farther to look at the outcomes that matter most to quality of life and set their sights on career success, civic engagement, and lifelong learning.

As stated above, becoming college- and career-ready and successful is a progression through time, across skill domains, and from one program or level to the next. That means that policies must take into account the number of years it takes for young people to be college- and career-ready, the different

skills and knowledge that need to be developed, and the various providers, programs, or systems that touch young people on their journey.

Many different types of programs and people are involved in this process, and each has a particular role to play in a student's advancement. Some programs are more comprehensive than others, but even small, stand-alone programs or services or advisors can play an important role in the education and developmental process. From the middle school advisor who recommends taking Algebra I in eighth grade, to the employer who provides an internship to a student who learns about professional teamwork, to a tenth grade high school teacher who mentors a C student with no college plans about getting to college, to the alternative education teacher who helps an 18-year old catch up on high school credits so he can graduate high school and earn a certificate in the allied health field, to adult volunteers who help students complete their financial aid forms, each provides an important contribution that could be the "make or break" point in the college-going process. As such, all the various players share responsibility for the success of the student at whatever point they touch that youth.

Creating the notion of shared responsibility across programs and systems requires setting a global view and goal, one that spans across systems and structures. Certain policymakers are in a key position to set up these system-wide goals, as when a governor sets a goal of college- and career-readiness for the students in the state, a mayor sets the goal for all the students in the city, or a school superintendent sets the goal for the students in the district. The important step is that a prominent policymaker sets a high goal for all students and holds all the various providers accountable to meeting that goal.

There are various other aspects of a college- and career-ready and success system that need to be in place and that policymakers can encourage and support. Policies should:

- Ensure that a plan exists to coordinate efforts to provide a continuum of services that begin in middle school and run through high school and into and through college completion.
- Address not only academic strengths and weaknesses, but help young people develop technical and occupational skills, 21st Century and employability skills, goal-setting and personal development and wellbeing.
- Support expanded learning opportunities that occur afterschool or during out-of-school time as important strategies to augment school-based learning for older youth.
- Include multiple providers, not just the school system, such as afterschool, alternative education, employers, apprenticeship, colleges, and community service.
- Support partnerships of providers to work together to address the needs of various students in a comprehensive manner.
- Provide routes for youth who drop out of middle or high school to reconnect to education so they can advance, at their own pace, to postsecondary education and careers.

- Build the capacity of the adults within the various systems so they have the skills to provide differentiated instruction and interventions, know about other systems and providers that can offer various supports to young people, and understand that young people need a range of skills to be successful.
- Develop assessments that measure more than core academics and include skills important to college and career success, such as critical thinking and problem solving.
- Collect appropriate data to demonstrate long-term outcomes across systems.

Recommendations Based on Elements of Success

The review of the 26 evaluations has taught us a lot about successful elements of programs, as was described in the Elements of Success section (Part I). We are using the framework of the Elements of Success to organize the policy recommendations, which are presented in two categories: Structural and System-Focused Elements and Programmatic Elements. The recommendations in the following section are drawn from our meta-analysis of the 26 evaluations. Because the 26 programs we reviewed are so diverse, the findings are also quite diverse. (We would also remind the reader that each program profile included one or two policy implications that seemed most salient following each summary, and they can serve as a resource for policymakers as well.)

Structural and System-Focused Recommendations

The elements of success that were identified in this category include Leadership and Autonomy, Effective Assessment and Use of Data, Strategic Use of Time, and Partnerships and Cross-Systems Collaboration.

Leadership and Autonomy – As stated in the Big Picture recommendations, it is important to set a clear goal for the program and provide strong, visionary leadership that pushes boundaries and seeks innovative ways of supporting young people. Leaders need professional development opportunities that allow them to build the capacity of their programs and see how they fit into a continuum of services for young people. Leaders also need to set the expectation that every young person can be college- and career-ready and successful.

Programs should have increased flexibility to implement curriculum and structural reforms that best serve their students and to forge relationships with other service providers. This can mean relaxing funding requirements, changing rules for eligibility, or supporting partnerships or collaborations.

Effective Assessment and Use of Data – Formative and summative student assessments should be used to drive instruction and interventions, and all stakeholders should be trained in analyzing such data and sharing information with students, families and communities. Early warning systems should be put into place to identify the students with the greatest need for particular interventions. All data and assessment systems should be disaggregated by student demographics.

High school assessments should be aligned with entry-level college work to send a clear signal to students, parents, teachers, and counselors about the level of work required for postsecondary success.

While it is important to have a clear standard for proficiency, it is also important to have alternative assessments that use performance-based measures to assess knowledge, skills, and abilities across domains. Alternative schools should be given the flexibility to develop alternative assessments that can be used to determine promotion and program completion, linked to college readiness, in order to recover students and accelerate progress when they are behind in credits.

Funders should require a certain percent of funds to be used for program evaluation or data collection, to support continuous program improvement.

Data systems must not only track the progress of students through high school and into postsecondary education, but also link to the labor market, to ensure that the ultimate goal of career success is met. The ongoing efforts by many states and the support from the federal government to build longitudinal data systems is commendable, and these activities need to be pushed to be as comprehensive as possible. Accurate measures of high school dropout, high school graduation, and college persistence and completion rates with clear reporting to the public is critical.

Strategic Use of Time – Policies should incentivize programs and services to develop expanded learning opportunities and flexible scheduling. Some students may benefit from a longer school day and year; others might benefit from programs in the out-of-school time hours or during summer; and others might need programs in the evening to accommodate other life demands.

Partnerships and Cross-Systems Collaboration – Partnerships and cross-system collaboration should be encouraged and supported through policies as well as a larger vision of how various providers contribute to the overall readiness and success of young people. Funding flexibility and relaxation of certain rules and regulations can promote collaboration. Providing financial support for intermediaries to develop programs is helpful.

With regard to the secondary-postsecondary transition, policies can be created to support dual enrollment and accelerated mechanisms that allow high school students to earn college credits. Articulation and credit transfer policies need to be transparent and consistent. Student eligibility requirements for participation in college credit courses should not be so restrictive as to limit participation to only top performers. Funding should be provided to low-income students to help cover costs of tuition, books, and fees, so they can access such programs.

Programmatic Recommendations

The elements of success that were identified in this category include Rigor and Academic Support, Relevance, Relationships, Effective Instruction, College Knowledge and Access, and Youth-Centered Programs.

Rigor and Academic Support – Policy must demand high expectations for all students and then provide the supports for students to master an academically rigorous program. This means that teachers need to be prepared to teach rigorous curriculum in an engaging way and help a wide range of students master challenging material. Increased tutoring and academic support will be needed for some students.

Students also need to have access to academic success courses so students learn how to learn and to think and reason independently.

For many students, taking a college course for dual credit is an effective strategy for accelerating learning, and these opportunities and other opportunities to accelerate learning should be widely available.

High school curriculum must be aligned with entry-level college curriculum. Requirements for high school graduation can be raised to ensure students are completing the work necessary to ensure success in college.

Relevance – School can become more relevant to young people by providing instruction that demonstrates how academic concepts are used and applied in the real world, are integrated across disciplines or with occupational or technical knowledge, are project-based, use technology differently, or build in the development of 21st Century skills. Policies can support professional development that allows teachers to create new, vibrant curriculum and better understand how knowledge is applied.

Another strategy to help young people see relevance in what they are learning is to expose them to workplaces through career exploration, internships, work-based learning, apprenticeships, entrepreneurship, career academies, or service learning. Policies can encourage these programs and provide support for counselors or job advisors to form partnerships with employers and build links between work-based and school-based learning.

Relationships – While it is difficult for policies to create a personal relationship between a student and caring adult, policy can support the development of meaningful relationships by providing funding for additional counselors and advisors in schools and programs and to allow funding to be used to implement advisories and mentoring programs, particularly at transitional stages.

Creating and supporting smaller learning environments and communities, where young people are well-known by adults and given individualized supports to meet their needs can be encouraged through policy. Other types of programs that involve family members or offer residential or single-sex programs to meet specific needs can also be encouraged and supported through policy.

Effective Instruction – Teachers, faculty, counselors, and other adults in the education enterprise need to understand how to promote academic success and that it requires a focus on future orientation and personal development and wellbeing as well as the development of academic, technical, 21st Century skills and academic success behaviors. Professional development should be embedded, and teachers and faculty should have common planning time to align coursework, develop integrated (across discipline and system in some cases) curriculum, team teach, and participate in professional learning communities. Teachers and faculty need to have the skills to differentiate instruction, use assessments to drive instruction, make the learning relevant and applied, and intentionally develop critical-thinking and problem-solving skills.

College Knowledge and Access – Students need exposure to the world of college and access to information about colleges, the application process, financial assistance, and what it is like to be in a college culture. Support for guidance and counseling and for adults to assist students in applying to college and completing financial assistance forms should be supported. (While we have not said much about financial aid and paying for college, because the evaluations did not focus on financial aid, we recognize that financial barriers are severe for many students and must be dealt with.)

Early guarantees of financial assistance and providing funding for dual enrollment, textbooks and other college expenses can help ensure college course completion and persistence. Programs located on college campuses or programs that expose young people to the world of college play a critical role in opening the door to higher education to more students.

Youth-Centered Programs – Programs need to be designed to meet each young person where they are and advance them with the appropriate supports, academic, or otherwise. Programs also need to be comprehensive and draw upon various resources to meet the various needs of students. Policies can support the creation of new models of secondary school that partner with community organizations to provide multiple services and build the capacity of schools, colleges, and other service providers so they work effectively together to meet the needs of young people.

Closing

While the US faces a challenge in preparing all young people to graduate high school ready for college and career success, there is a growing body of knowledge about what it takes to make this happen. The programs summarized in this compendium demonstrate various successful approaches in serving youth and provide evidence that it is possible. Policymakers can use this information to develop effective systems, programs, and supports to help youth at various stages of their educational and personal development and ensure more of our young people are ready to face their future.

Appendices to Include:

Matrix of Programs

Glossary of Terms

References

About the Authors

Sarah Hooker, Program Associate, joined AYPF in 2008. Ms. Hooker identifies and researches issues, policies, and programs for AYPF's publications and learning events, and convenes policymakers for site visits, Capitol Hill forums, and roundtable policy meetings with a special focus on college- and career-readiness for groups that traditionally underrepresented in higher education. She also has a particular interest in the educational outcomes and college success of English Language Learners and immigrant students, and facilitates the sharing of information and best practices related to these growing and underserved populations.

Ms. Hooker has a background in policy research, advocacy and program development related to immigrant education and integration, as well as social services for low-income children and families. She previously coordinated a community-based college-access program for Latino students in Chicago, led advocacy campaigns on federal policy affecting higher education opportunities for immigrant youth, and conducted field research as a consultant for the National Alliance of Latin American and Caribbean communities. She also developed a program to reconnect homeless parents with opportunities for continuing education and vocational training at L.A. Family Housing.

Ms. Hooker holds a Bachelor's Degree from Pomona College in Claremont, California and a Master's Degree from the School of Social Service Administration at the University of Chicago.

Betsy Brand, Executive Director of AYPF, is a leading expert in how to improve the lives of young people through education and workforce policies, specifically career and technical education (CTE) and secondary education. She has spoken and written extensively on these issues and has testified multiple times before the U.S. Congress.

As AYPF's Executive Director, Ms. Brand identifies best policies and practices that lead to positive outcomes for the nation's young people. She oversees the creation of nearly 40 policy-oriented learning events annually—forums, briefings, and field trips—and the research and development of publications and policy briefs, all of which serve to inform the work of leading policymakers, practitioners, and researchers. Prior to her appointment in 2004, she served as the organization's Co-Director since 1998.

Ms. Brand has developed a deep understanding of education and workforce issues by crafting, implementing, and analyzing policy for the U.S. Congress, the U.S. Department of Education, and private clients. She was previously President of Workforce Futures, Inc., where she provided clients with public policy advocacy as well as analysis and development of legislation and regulations related to education reform and workforce preparation and development.

From November 1989 to January 1993, Ms. Brand served as Assistant Secretary of the Office of Vocational and Adult Education, U.S. Department of Education, where she served as primary spokesperson for the Federal Government on issues relating to vocational-technical and adult education and workforce development; directed the White House Task Force on Literacy; increased programmatic collaboration with the Departments of Labor, Health, and Human Services, Commerce, and Housing and

Urban Development; implemented the Perkins and Adult Education Acts, and oversaw the management of the Perkins and Adult Education Acts.

Prior to this, Ms. Brand spent twelve years working for the U.S. Senate and the U.S. House of Representatives, covering a wide range of legislation, including the Title I, Perkins, Adult Education, Individuals with Disabilities Education, and the Higher Education Acts.

Ms. Brand received her BA from Dickinson College in Carlisle, Pennsylvania.