

ISSUE BRIEF

Linking Secondary and Postsecondary Systems – Lessons from Indiana

In February 2009, AYPF hosted a field trip to Indianapolis, Indiana showcasing cross-system linkages aimed at increasing the number of students prepared for, attending, and succeeding in postsecondary education and the world of work. Indiana has been a leader in its implementation of a college preparatory high school curriculum and its use of financial incentives and academic support strategies to foster a college-going culture across the state. The trip highlighted Indiana's cross-system collaboration to align high school education with skills and knowledge needed at the postsecondary level and in the workplace; use of acceleration mechanisms and other academic strategies to bridge the educational systems; innovative approaches for teacher preparation and professional development; and the state's ongoing efforts to develop a data system linking K-12, higher education, and the labor market.

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Background

In order to keep up with the demands of today's global economy, the nation's education system must improve the supply of individuals qualified to work in highly skilled jobs. Increasing the number of high school graduates obtaining a postsecondary degree or certification is one essential component of preparing the workforce with the necessary skills for today's jobs. In order to prepare students for success in both high school and higher education, the K-12 and postsecondary education systems must collaborate to create a seamless pipeline of education extending from early education through completion of a postsecondary credential.

Building a strong P-20 pipeline is key to creating an educational system that prepares all students to be successful. One critical transition point in this continuum occurs at the end of high school, when many students struggle in terms of readiness for and persistence in college coursework. Most young people indicate they want to go to college; unfortunately many too often are not academically prepared and do not have a realistic sense of what is required. By the time students enter high school, many have already fallen behind in critical subject areas such as English and mathematics that are integral to high school completion and college and career readiness.

Several effective strategies exist to strengthen the transition point at the completion of high school with the goal of ensuring more students are able to advance to credit-bearing college coursework without the need for remediation. For instance, many states have created P-16/P-20 councils to align educational goals from Pre-Kindergarten to postsecondary education. Aligning high school standards and curricula with the content and skills needed for continuing studies and high skill jobs is an essential component of ensuring students are prepared for the challenges of postsecondary education or the world of work. Programmatic strategies like secondary-postsecondary learning options (SPLOs), which include early college high schools, Advanced Placement, and dual enrollment, provide secondary students the opportunity to engage in, and potentially earn college credits from, college-level coursework while still in high school. SPLOs also develop a college-going culture by offering financial benefits associated with earning college credits and, in some instances, subsidizing course costs to the student.

To pursue comprehensive education systems reform at the state level, several key policy issues must be addressed. These include:

- Alignment of curriculum and assessment to ensure that students are mastering college- and career-ready skills and content;
- Creation of a college-ready and college-going culture including appropriate social supports for students and their families;
- Continuous professional development for all educators including counselors that leverages resources available in secondary and postsecondary education systems; and
- Development of data systems creating effective linkages between secondary, postsecondary, and workforce systems to monitor progress and identify areas for improvement.

Indiana provides an illustration of a state that has worked to align its education systems and to facilitate the transition from high school to postsecondary education. As the following sections of this brief will explain, the collaboration of stakeholders across several sectors of society focused on strengthening the educational pipeline has been instrumental to Indiana's successes.

AYPF Field Trip: Focus on Indiana

In February 2009, the American Youth Policy Forum (AYPF) hosted a professional learning opportunity in Indianapolis, Indiana for state policy leaders from Colorado, District of Columbia, Hawaii, Minnesota, and Utah. This field trip was one in a series funded by the Bill & Melinda Gates Foundation, in order to explore critical issues in high school reform.

The goal of the AYPF field trip was for policy leaders to learn about Indiana's efforts to create cross-system linkages between secondary and postsecondary education. Participants learned about Indiana's efforts from a variety of presenters including: Stan Jones, Indiana Commissioner for Higher Education; Wes Bruce, Chief Assessment Officer, Indiana Department of Education; Luke Messer, former Member of Indiana House; Cheryl Orr, Associate Commissioner for Communications and P-16 Programs and Planning, Indiana Commission for Higher Education; Seana Murphy, State Director, 21st Century Scholars Program; Jeanna Keller, Program Officer, Lumina Foundation; Hope Clark, Director of Research and Analysis, Department of Workforce Development; and others. Participants also visited [Ben Davis University High School](#) in the Metropolitan School District of Wayne Township and [North Central High School](#) in the Metropolitan School District of Washington Township to see the impact of the policy work at the school level.

While this field trip provided a detailed look at Indiana's education reform, the trip also afforded participants an opportunity to consider the broad issue of systems alignment. The discussions and site visits highlighted a variety of lessons learned that apply to the unique challenges faced by each state in attendance.

In Context: A History of Indiana's Education Reform

In 1986, less than 39% of Indiana students went to college directly after high school as there was an abundance of low-skill, high-wage, agricultural and manufacturing jobs available.ⁱ With a changing economy and the emergence of more high-skill jobs, Indiana recognized that further education

would become a necessity for success after high school. The state was faced with the challenge of convincing students, parents, and educators that postsecondary education would become essential for the jobs that would be available in the increasingly technology-driven economy. Working with K-12 educators, business owners, and Indiana's policymakers, the Indiana Commission for Higher Education (ICHE) spearheaded a movement to create a college-going culture in order to meet 21st century labor demands.

The state adopted a multi-faceted approach that focused on changing attitudes and instilling the belief that college was a financially viable option despite the availability of low-skill, high-wage jobs. In an effort to remove the financial barrier associated with college attendance, the 21st Century Scholars Program was introduced in 1990 by then-governor Evan Bayh. The 21st Century Scholars Program provides support to students and families by linking early decision-making to future opportunity. The program encourages students from low- and moderate-income families to commit during their 6th, 7th, or 8th grade year by pledging to earn a 2.0 GPA minimum (on a 4.0 scale) and fulfill a pledge of good citizenship throughout high school. In return, students are guaranteed free tuition at a state college or university or a like portion of tuition at independent institutions in Indiana. By creating incentives to stay on track for admission to college, the program instills an early awareness for students in the middle grades of what is necessary to attend college.

To further cultivate a college-going culture, Indiana took an aggressive approach to disseminating information about postsecondary options, financial aid, career exploration and planning, and other necessary steps to apply and plan for college through Learn More Indiana (formerly known as the Indiana College and Postsecondary Advancement Center). Working with the ICHE, Indiana Department of Education, and the Indiana Department of Workforce Development and leveraging the resources available through the [Know How 2 Go initiative](#) sponsored by the Lumina Foundation, Learn More Indiana is charged with being the one-stop resource to help students and parents plan for college and careers. Utilizing the Learn More Indiana website, students and parents can learn about colleges, explore different and emerging careers in Indiana, and learn about financial aid options. Learn More Indiana also partners with schools and local community organizations to create marketing campaigns that utilize media and local communication for personalized contact.

To solidify their commitment to linking secondary and postsecondary education, stakeholders in Indiana have worked together to develop new standards of education that serve as a gateway to postsecondary success and economic development. Indiana has leveraged this collaboration to pass legislation, formalizing partnerships inclusive of policymakers, higher education, K-12 education, communities, and business leaders to influence education practice. In 1998, Indiana created the Education Roundtable, which, by Indiana law, is comprised of leaders from K-12 education, higher education, business, community, as well as representatives from both legislative houses and both political parties in Indiana's General Assembly. The Education Roundtable makes recommendations for improving student achievement to the Governor, Superintendent of Public Instruction, General Assembly, and Indiana State Board of Education. The Roundtable has focused their efforts on providing all children with a rigorous and preparatory academic foundation at all levels by adopting the P-16 Plan for Improving Student Achievement. This plan addresses a broad range of issues including Academic Standards, Assessment, and Accountability, Teaching and Learning, School and District Leadership and Governance, Early Learning and School Readiness, Eliminating Achievement Gaps and Ensuring Academic Progress for All Students, Ensuring College and

Workforce Success, Drop Out Prevention, Higher Education and Continued Learning, Communication, and Effective Use of Technology and Efficient Use of Resources.

The hallmark of Indiana's collaboration has been the development of the Core 40 curriculum. In 1994, Indiana adopted the Core 40 curriculum as the best preparation for college and workforce success. Developed to represent what courses students need for success in college and the workforce, Core 40 curriculum reflects the collaboration among Indiana's business, higher education, and K-12 leaders. Upon introduction it was mandatory for schools to offer the curriculum, and Core 40 became a voluntary option for students. Beginning with the entering freshman class in 2007, completion of Core 40 is a graduation requirement.

Key Policy Issues

Through key policy actions, Indiana's stakeholders have taken critical steps to improve the educational experience of their students from Pre-Kindergarten through postsecondary education. Postsecondary education has become a viable option for many Indiana students as a result of preparation through Core 40 and additional programs that promote both college access and success. Indiana continues to work on creating assessments that will provide more valid and accurate data as a basis for further curriculum development. In addition, Indiana's efforts to remove financial barriers has encouraged youth to see postsecondary education as an option and Indiana continues to educate and inform families to build knowledge of the array of postsecondary options throughout the state. These efforts are anchored in professional development and support for educators in order to build sustained leadership that is focused on college and workforce success. Furthermore, Indiana continues to develop data systems that provide the ability to track critical indicators of long-term success while also providing the ability to share information for continuous improvement.

Key Policy Issue: Curriculum and Assessment

As more students pursue Core 40, Indiana has improved their college-going rates and their college completion rates. In 1992, 50% of high school graduates immediately enrolled in college the next fall and by 2004, the percentage grew to 62%.ⁱⁱ Indiana's Education Roundtable has played an integral role in pushing linkages between secondary and postsecondary education. The Roundtable recognized that the skills needed to succeed in the workforce, college, and other postsecondary options had become interchangeable and thus committed to promote the more rigorous Core 40 curriculum as the best preparatory curriculum for success in college and the workforce.

Aligning Curriculum

In 2004, the Roundtable developed key resolutions focused on aligning Indiana's high school diploma requirements with the knowledge and skills students need to succeed in college and the workforce. The resolutions called for:

- Improving diploma requirements;
- Making Core 40 the default curriculum for all students;
- Adding a Core 40 with Technical Honors diploma; and
- Requiring Core 40 completion for admission to the state's 4-year universities and to receive state financial aid to attend 4-year universities.

Recognizing the benefits of Core 40, Indiana's General Assembly passed legislation in 2005 to make Core 40 the required curriculum with an opt-out provision and a requirement for admission to Indiana's four-year public universities starting with students entering high school in 2007 (Graduating Class of 2011). Indiana now has four different diploma options: Core 40, Core 40 with Academic Honors, Core 40 with Technical Honors, and the General Diploma.

Creating Aligned Assessments

While initial data have shown higher rates of college completion for those who complete Core 40, Indiana is challenged with the task of creating assessments that can more accurately measure a student's preparedness for postsecondary and workforce success. In addition to updating existing end-of-course assessments, Indiana continues to develop and experiment with a variety of instruments that will provide data on student knowledge of Core 40 academic standards and dependable signals of college readiness. The ICHE has been tasked with developing assessments that are linked to postsecondary success. Linking assessments to postsecondary success could play a vital role in further developing cross-system linkages. Indiana is still in the beginning stages of their effort.

Key Policy Issue: Tools to Create a College-ready and College-going Culture

Creating a college-ready and college-going culture has been at the heart of Indiana's comprehensive education reform spearheaded by the development of the Core 40 curriculum. The involvement of the Indiana legislature has been critical in scaling several initiatives, which help students envision postsecondary education as an option, including opportunities to engage in postsecondary education opportunities while still in high school along with comprehensive college advising for students and their families.

Support for Dual Credit

For over two decades, Indiana has supported several dual credit mechanisms through which high school students earn secondary and postsecondary credits simultaneously. Indiana has leveraged stakeholder support with legislation to support a college-ready and college-going culture. Indiana's 1987 Postsecondary Enrollment Options Act (PSEO) encouraged students to take dual credit classes in grades 11 and 12 by working with postsecondary institutions to allow secondary school students to enroll in their course offerings. In addition, Indiana has a robust Advanced Placement (AP) program available in most of its high schools and has been working to grow the number of International Baccalaureate (IB) programs across the state.

In 2006, the Double Up for College law was passed to promote collaboration among secondary and higher education systems for the purpose of developing dual credit opportunities. As a result of Double Up, 11th and 12th grade high school students can enroll in and earn dual high school/college credits in courses that are governed by an articulation agreement that utilizes the Core Transfer Library (CTL), the statewide articulation agreement of courses offered across all public institutions. CTL is a database of courses that transfer among all Indiana public college and university campuses. Included in the CTL is the identification of an articulation equivalent course at each different public institution making it easier to earn credit towards a degree regardless of which higher education institution the student decides to attend. Students on free or reduced lunch in Indiana

taking part in Double Up are eligible to receive a tuition and fee waiver from Indiana's public colleges and universities. In addition, the College Preparation Curriculum Act, amended in 2006, states that each high school must provide at least two dual credit courses and two Advanced Placement (AP) or International Baccalaureate (IB) course offerings.

The support for dual credit options allows students to develop college-level skills while getting a jumpstart on postsecondary education by earning credits. Indiana has concentrated their efforts on making postsecondary education a financially viable option for students by removing some of the financial barriers that might prevent young students from seeking postsecondary education. With the availability of dual credit options, secondary and higher education institutions have been able to subsidize some of the costs. The state has absorbed some of the financial burden by paying AP exam fees in the areas of math and science for 11th and 12th grade students. Additionally, Indiana continues to subsidize all AP subject exams for low-income students that qualify for the College Board fee reduction. In addition, the PSAT is offered without cost to every student, which has led to a growth in the number of students taking the SAT.

Building College Knowledge

Building college knowledge has been vital to developing a college-going culture. Disseminating information to students and families has been a priority to raise awareness and knowledge on topics such as the college application process, financial aid, and programs such as the 21st Century Scholars Program. Learn More Indiana represents the statewide communication effort to support students and families in building their college knowledge. Learn More Indiana utilizes a multi-pronged approach: a helpline, informative publications, student surveys, campaigns, and community alliances to cultivate a new culture among Indiana's families to better understand college as an option. Their website, www.learnmoreindiana.org, serves as the hub of all these efforts. College Goal Sunday is another statewide initiative aimed to help students and families understand and complete the financial aid application process. College Goal Sunday provides on-site help from financial aid experts, primarily from Indiana colleges and universities.

Collaboration has been critical to fostering a college-ready, college-going culture in Indiana. The ICHE, Indiana Department of Education, Indiana Department of Workforce Development and the State Student Assistance Commission of Indiana, Indiana's colleges and universities, USA Funds Inc., and the Lumina Foundation for Education have all worked together to provide information that supports the building of college knowledge in Indiana. Furthermore, in 2008, the Indiana General Assembly created the Concurrent Enrollment Partnership (CEP) to stimulate innovation and collaboration among state educational institutions. The CEP has been charged with setting rigorous academic standards, coordinating outreach and recruitment of students and teachers, and developing a plan to expand the dual enrollment program to every high school in Indiana.

Key Policy Issue: Professional Development

Teacher preparation and professional development sit at the intersection of K-12 and higher education. By leveraging the resources of both systems to interact with one another, the teacher pipeline can be improved and thus, improve instruction and student success. Indiana has used these ideas as a driving force to develop a variety of professional development opportunities for

new and experienced teachers. Much of Indiana's recruitment and professional development efforts have focused on STEM-related fields, as this is a high-need area.

The Woodrow Wilson Indiana Teaching Fellowship offers rigorous disciplinary and pedagogical preparation, extensive clinical experience, and ongoing mentoring to career changers from STEM fields who are recruited to teach in Indiana high schools. Funded through a \$10 million grant from the Lilly Endowment, a \$30,000 stipend is offered to Fellows along with admission to a master's degree program at one of four participating Indiana universities, preparation in a high-need urban or rural secondary school, support and mentoring throughout the three-year teaching commitment, guidance toward teaching certification, and lifelong membership in their national network of Woodrow Wilson Fellows. The Fellowship plays an integral role in recruiting highly skilled STEM teachers to work in high-need schools where recruiting is particularly difficult. The Fellowship also emphasizes the importance of mentorship and continuing education in order to maintain a productive teacher pipeline.

Indiana has also invested in developing ongoing professional development for experienced teachers. The Indiana Science, Technology, Engineering, and Mathematics (I-STEM) resource network provides support and continuing education through its website, www.istemnetwork.org, in addition to workshops and events. I-STEM works to develop community partnerships and promotes information sharing to develop relevant curriculum for students to engage in. Another teacher development initiative, the Indiana AP Bridge Project, works to expand the capacity for AP in Indiana by piloting activities that will develop a systemic and comprehensive AP training and incentive program in science, math, and English for Indiana teachers and schools. The Project is working to create summer institutes that will be free and offered in locations across the state.

Key Policy Issue: Data Systems

Efforts to link K-12, higher education, and workforce data systems have focused on both the infrastructure and tools used throughout the state to make data more available and transparent. Efforts to build a more effective data system were stimulated by the Joyce Foundation when they provided seed money to build a system capable of tracking workforce outcomes. The Lumina Foundation followed with additional funding to better understand how economic and workforce demands could influence educational reform. To address these needs, Indiana created a statewide data system that integrates data sets from the Department of Workforce Development and the Commission for Higher Education. The Indiana Workforce Intelligence System (IWIS) provides the ability to track supply and demand for skilled workers, to determine where new graduates and new workers are going, and to display how certification and degrees in Indiana are linked to higher pay.

Indiana continues to develop the IWIS data system to effectively and efficiently share information between sectors for continuous improvement. With the proper transparent data system, critical indicators of long-term success could be tracked and utilized for ongoing system reform. One solution that is being developed is the availability of electronic transcripts that are utilized by secondary and postsecondary systems. By creating a seamless system used by both educational levels, K-12 education and postsecondary education will be able to better determine indicators of success using data that are already being collected. In addition, data on degree completion, dropout rates, time to graduation, and college preparedness could provide information for needed reform. Currently, students have the capability to send an electronic version of their transcript from their secondary institution to any public higher education institution in Indiana for free. While this has

improved transparency between systems, there is no data tracking mechanism that has yet been built into the transcript ordering system.

Considerations for State Leadership

To strengthen the state's education pipeline, Indiana has focused on linking secondary and postsecondary education to create a seamless P-20 system. This effort, which is described above, included aligning curriculum and assessment, creating a college-going culture, providing relevant professional development for educators in both systems, and building a comprehensive data system.

Leaders in other states can foster the following conditions that were critical to Indiana's success with a comprehensive set of strategies aimed at linking secondary and postsecondary education:

A clear, well-articulated shared vision for education that reflects the demands of both higher education and the workforce. Key policy leaders throughout the state must create a common shared vision around the goals of its education system and work to articulate the responsibilities of each entity throughout the P-20 system. In Indiana, this vision is articulated through the mission statements of both the Indiana Department of Education and the Indiana Commission for Higher Education. Both emphasize the need to successfully prepare more students to enter and succeed in college and the workplace.

An inclusive stakeholder collaborative that is responsible for shepherding and communicating the shared vision across the state. State leaders can formalize a cross-system and cross-sector collaborative to advance a statewide educational reform agenda. This collaborative in Indiana, the Education Roundtable, is co-led by the governor and superintendent of public instruction and includes representatives from K-12 and higher education as well as a variety of sectors throughout the business community. Since its inception in 1998, the Education Roundtable has served as both an incubator of education reform ideas and a leading advocate.

Willingness to leverage resources across systems. Statewide educational reform efforts will benefit greatly from the committed partners leveraging their resources for overall improvement of the system. For example, the 21st Century Scholars Program, which was created by the governor and codified/funded by the legislature and supported by both K-12 and higher education in Indiana, is a perfect example of leveraging resources.

Sustained commitment to communication that shapes awareness of what is needed in order to go to college. State leaders can support a statewide communication campaign to ensure students and their families understand the college preparation and application process. Such a communications campaign can increase students' preparedness to access and succeed in postsecondary education. Learn More Indiana detailed in this brief is central to this effort in Indiana.

Conclusion

Indiana has accomplished a great deal in terms of education reform and continues to work towards improving youth education outcomes and preparation for future success. Collaboration and partnerships have fueled education reform, particularly in linking secondary and postsecondary education systems. Higher education, business, and K-12 education have been able to work with the state governing bodies to create and pass legislation in order to formalize partnerships, graduation requirements, and other key policies that are vital to improving college and workforce preparedness. Leveraging resources, particularly the contributions of higher education in the state, has allowed Indiana's systems to work with one another to develop a comprehensive new outlook for their youth, educationally and economically. Indiana continues to work on developing assessments and a statewide data system that will be used to track student outcomes for preparedness and success.

ⁱ Sending More Students to College. Handout. Indiana Education Roundtable.

ⁱⁱ History/Evolution of Core 40 presentation. Stan Jones. Indiana Commission on Higher Education. Slide 8. February 19, 2009.