





AT A GLANCE

This case study details how the four communities of the Great Lakes College and Career Pathways Partnership are working to systematically move the needle to ensure that all young people are prepared to not only meet the current and emerging needs of the workplace, but to also find value and meaning in their working lives, and fully realize their best possible futures.

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MAY 2019

EXECUTIVE SUMMARY

A Clearer Path to College and Career Success

Across the country, there is consensus that we must better prepare *all* young people to succeed in today's rapidly changing economy. But there is little consensus on *how* to do it. Launched in 2016 by the Joyce Foundation, the Great Lakes College and Career Pathways Partnership aims to meet this need through creating and expanding high-quality college and career pathways to advance equity and economic mobility for the next generation in the Great Lakes region. GLCCPP supports four communities that each bring a unique approach to this work: the Northwest Suburbs of Chicago, Illinois; Rockford, Illinois; Madison, Wisconsin; and Central Ohio.

All GLCCPP communities are working toward ONE COMMON GOAL

to create sustainable systems of college and career pathways that increase the number of young people—especially students of color and from low-income households—who successfully transition from high school into college and career.

All four are grounded in a shared commitment to equity, collaboration, and sustainability. They draw upon national best practices and strategies to inform how they establish strong leadership and governance structures, seamlessly align students' academic and career preparation across high school and college experiences, and develop systems to provide equitable access to work-based learning that connect youth to the world of work.



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The strategies and approaches across the GLCCPP communities elevate promising examples of new and emerging capacity to provide high-quality pathways experiences to all students:



In the **Northwest Suburbs of Chicago**, leaders in secondary
education, higher education, and
industry are collaboratively building

a system of pathways that is tightly aligned with regional economic needs and opportunities. Supported by the Northwest Educational Council for Student Success, which helps to coordinate across partners, the region has experienced a significant increase in the number of students taking college credit courses during high school, especially among students of color. The Northwest Suburbs is a national leader in providing work-based learning at scale for pathways students.



Rockford, Illinois, capitalized on an existing career academy infrastructure in its high schools to develop pathways that are more closely aligned to

industry demand, college and credential requirements, and students' interests. The local community college and Rockford Public Schools partnered to expand college credit course opportunities for high school students. With the support of Alignment Rockford, the community is now piloting a grade-level framework for work-based learning that will provide all students with increasing exposure to the workplace in their chosen fields of study.



In **Madison, Wisconsin**, school district, city, county, higher education, and industry leaders engaged the local community in co-designing a system of

personalized pathways in health services. With approximately 25 percent of students in grade nine already enrolled in this pathway, Madison reports promising first-year academic gains for participants, most notably for black students, and is preparing to offer new pathways and reach more students across the district. Strong collaboration with local industry partners is expanding the region's capacity to provide work-based learning at scale.



Central Ohio's regional commitment to pathways has yielded early gains in equity, including significant decreases in racial and socioeconomic gaps in

the numbers of students who earn a college degree or credential. The region's pathways initiative is aided by fully engaged industry partners and a supportive state education and workforce policy environment. With strong leadership from Columbus State Community College, Central Ohio serves as an example of how to catalyze a vision to design a pathways approach that spans a number of districts across a large metropolitan region.

Collectively, the GLCCPP communities show early positive gains for students:

- A greater representation of students of color, students from low-income households, students with special needs, and English language learners are enrolled in college and career pathways compared to the overall student population
- Increases in students earning college credit during high school
- More pathways students are on track for graduation compared to their non-pathways peers
- Narrowing of racial gaps in students' academic achievement

The individual and collective efforts of the GLCCPP communities hold key lessons for leaders in other regions who aim to improve outcomes and expand opportunities for young people through equitable pathways systems, including:

- High-quality college and career pathways need to be anchored in equity to ensure that all students, especially students of color and students from lowincome households, can access highquality college and career opportunities after high school
- Employers need to be strategically engaged to scale high-quality, workbased learning experiences for students
- High schools and college partners need to jointly develop policies to

- reduce remedial education needs and expand dual enrollment options for students—including defining roles and responsibilities for providing student supports
- Communities need to build the capacity of local data systems to collect, report on, and use student data to continuously improve upon the implementation of college and career pathways
- This report offers further key lessons for civic and regional leaders, secondary and postsecondary system leaders, education and industry partnerships, and state policymakers to consider as they design, launch, and scale college and career pathways systems in their own regions or states

The progress within and across the four GLCCPP communities provides insight into how other communities across the country can systematically move the needle to ensure that all young people are prepared to not only meet the current and emerging needs of the workplace, but to also find value and meaning in their working lives, and fully realize their best possible futures.

To learn more, please visit the Great Lakes College and Career Pathways Partnership website at www.glccpp.com and JFF's GLCCPP resource page at www.jff.org/glccpp.

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"It was my experience last year in Medical Terminology that convinced me to pursue a career in medicine."

—Shayla Sanchez, a high school senior in Illinois, on how her path to college and career came into focus

Shayla's experience came through Palatine High School's Project Excel—a four-year program tailored for first-generation college goers. Project Excel allows academically promising students to explore career options and start earning college credits toward a degree while still in high school.

Research shows that students need more than just academic content knowledge to thrive in college. First-generation college goers often face many barriers on the path to college. They need programs and opportunities that remove those barriers. They need a strong connection to a career they're interested in and to feel that a degree is within their grasp, both academically and financially. Programs like Project Excel create those connections.

Working with grade-level groups of about 75 students each, Project Excel provides academic support and counseling, builds social-emotional skills and behaviors, and guides students through the often thorny and overwhelming process of college discovery and application.

"Project Excel helped me discover my interest in medicine," Shayla said, "and guided me through the courses I needed to complete so I could take three dual credit courses in my junior and senior years."

Shayla—who also runs track and crosscountry, is a member of the photography and student exchange clubs at her school, and is deeply involved in her church and community—progressed through Palatine's demanding patient wellness pathway. Part of the health sciences career cluster, it's one of 16 pathways available to students in Illinois Township High School District 211. Her health sciences courses were demanding, and she earned nine college credits by completing three dual credit college courses through Harper College. All three courses help Shayla meet collegedegree requirements in her chosen field, removing barriers, including affordability, and bringing Shayla's career into sharper focus.

With the support of her school and community, Shayla has overcome many

of the obstacles that stand in the way of success for college-bound, first-generation students. Now, she sees a clear path to her degree and a great career:

It's meant so much to me to have support from both Project Excel and all my teachers for these past four years. I've been able to visit colleges and meet college representatives and get help filling out my college applications and FAFSA. And I really needed this help because, as a first-generation college student, my parents don't really know all the steps it takes to get ready for college.

Shayla can now confidently take the next step in her health sciences studies. She hopes to attend Loyola University, University of Illinois-Chicago, DePaul University, or one of the other four-year institutions in the Chicago area. By exploring career options and work-based opportunities in the patient wellness pathway, coupled with earning early college credit that aligns to credentials in the health sciences, Shayla has built a strong foundation to pursue postsecondary education and launch a rewarding career in her chosen field.

Inspiring stories like this one from the Northwest Suburbs of Chicago are playing out in communities all over the country as part of a broader movement toward high-

quality, career-aligned educational pathways for all young people. This case study highlights the partnership between education and workforce agencies in four midwestern communities—the Northwest Suburbs of Chicago, Illinois; Rockford, Illinois; Madison, Wisconsin; and Central Ohio—that are leading their respective areas, and the Great Lakes region as a whole, toward a brighter future by building a strong and lasting system for high-quality college and career pathways.

But in this work, one size does not fit all, and pathways systems must be able to adjust to each community's needs and build on each community's strengths.

While they vary in approach, structure, mission, and membership, these communities all share a vision of a pathways system that features three key elements:

0

An equitable system of high-quality pathways that support all students, especially students of color and students from low-income households, in overcoming barriers to educational and economic advancement

2

Collaboration between K-12, higher education, and industry partners—three sectors that each have their own complex circumstances, cultures, and goals

3

Durable commitments from key partners to sustain pathways systems through changes in leadership, political trends, and available resources



THE GREAT LAKES COLLEGE AND CAREER PATHWAYS PARTNERSHIP

In 2016, the Joyce Foundation launched an initiative aimed at creating and expanding high-quality college and career pathways to advance equity and economic mobility for the next generation in the Great Lakes region. This grant invited a set of sites—identified for the foundation by MDRC with support from JFF's Pathways to Prosperity team—to propose how they would improve and expand their pathway systems.

Joyce invited four communities to participate—the Northwest Suburbs of Chicago, Illinois; Rockford, Illinois; Madison, Wisconsin; and Central Ohio—and launched the Great Lakes College and Career Pathways Partnership (GLCCPP) to expand and improve these communities' unique approaches to regional college and career pathways systems driven by cross-sector coalitions.² Joyce also selected and funded three organizations to provide ongoing support and technical assistance as the initiative's coordinating team. They are ConnectED: The National Center for College and Career (ConnectED), JFF's Pathways to Prosperity team, and the Education Systems Center at Northern Illinois University (EdSystems).³

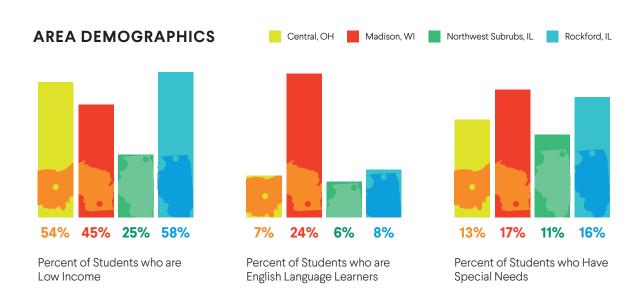
GLCCPP FOUNDATIONS

THE CORE CHALLENGE

America's workforce is experiencing the perfect storm: **our workers are lacking the skills needed to grow** and strengthen the changing economy, yet the high costs of college as well as lack of opportunity to engage in college and career-based learning is preventing our students from acquiring those skills and getting good jobs.⁴

FUNDAMENTAL GOALS

- ▶ Build sustainable systems of college and career pathways that help students transition from high school into college and the workplace
- ▶ Increase the number of young people—especially students of color and students from low-income households—who are ready for and successful in college, careers, and life, as measured by:
 - Enrollment in and completion of early college credit courses (dual enrollment and/or Advanced Placement [AP])
 - High school graduation and academic proficiency
 - Enrollment in postsecondary education, with decreased need for remedial coursework
 - Participation in work-based learning
 - Enrollment in and completion of pathways



A high-quality college and career pathways system should be designed for the unique needs and strengths of each community and its regional economy. Intentionally aligning a region's education and workforce systems ensures that young people gain the skills, knowledge, and postsecondary credentials necessary to enter careers in high-growth industries that offer high wages and the potential for career advancement. Each of the four partner communities brings unique strengths to GLCCPP, including: a compelling vision, dedicated leadership, strong K-12 and postsecondary partnerships, and/or high levels of employer involvement.

At the same time, both research and on-the-ground experience across diverse contexts suggest that high-quality pathways systems share common guiding principles and best practices. Therefore, the GLCCPP coordinating team developed a set of quality indicators to inform the design, implementation, and continuous improvement of pathways systems across and within the four GLCCPP communities.⁵ The quality indicators elevate three critical priority areas:

- 1. Leadership and governance
- 2. Secondary-postsecondary alignment
- 3. Work-based learning delivery systems

These indicators also detail how data and metrics, equity and access, communications and messaging, and learning and teaching are important considerations for successful pathways design and implementation that span across the three priority areas.

CRITICAL PRIORITY AREAS



Leadership and governance



Secondarypostsecondary alignment



Work-based learning delivery systems



Developing effective college and career pathways requires thoughtful connection, coordination, collaboration, and convening structures led by high-functioning intermediary organizations. These organizations must effectively lead the shared planning, implementation, and continuous improvement of a community's pathway systems.

This is not a recent development, nor is it unique to GLCCPP. The 2011 *Pathways to Prosperity* report highlights the importance of "umbrella infrastructures" such as intermediaries to guide the redesign of education and workforce systems, and to forge a new "social compact" between American society and its youth.

JFF identifies two types of intermediaries: (1) convening intermediaries that connect diverse stakeholders and provide vision and voice to the work, and (2) those that specifically focus on youth work-based learning opportunities by bridging employers and educators. While convening and work-based learning intermediaries have distinct roles and functions, they are sometimes led by the same organization and sometimes shared across two or more organizations.

As expected—and intended—the four GLCCPP communities employ a range of approaches to intermediary functions and organizations, based on local priorities and partner history:



Northwest Suburbs, Illinois

The Northwest Educational Council for Student Success (NECSS) serves as the intermediary for the three school

districts that make up the Northwest Suburbs—Districts 211, 214, and 220.



Rockford, Illinois

Alignment Rockford is a collective impact organization that aligns community partners and resources to support Rockford Public Schools (RPS) students so

that they "[graduate] from high school with marketable employment skills and [enroll] in post-secondary education and training," ultimately improving the economic and social well-being of their region. They convene key partners around the pathway vision and serve as the intermediary for this work.



Madison, Wisconsin

Rather than formally designating an intermediary, Madison distributes the convening and work-based learning intermediary

functions across multiple partners from its anchor team, which is comprised of leaders

What Is an Intermediary?

An intermediary is an organization that works closely with and between K-12 schools and districts, community colleges or universities, employers, and community-based organizations to promote a healthy pathway ecosystem. Intermediaries foster relationships and coordinate services among these partners to better support students in moving into family-supporting careers that offer opportunities for growth and further education. The intermediaries involved in this partnership are the Northwest Educational Council for Student Success and Alignment Rockford in Illinois, and Columbus State Community College.

Intermediaries are critical to supporting career pathways for students and promoting regional economic development at scale. Intermediaries streamline efforts, leverage resources and data collection capabilities, maximize employer partnerships and resources, and ensure consistency and quality for work-based learning opportunities. They make it not only possible, but productive and sustainable, to build meaningful connections between K-12 school districts, higher education institutions, and employers across a region to support students as they navigate these systems.

Many types of organizations can serve as intermediaries—or fulfill intermediary functions—including industry associations, joint labor management organizations, community colleges, workforce boards, chambers of commerce, or community-based organizations. A group of organizations can also collaborate to provide these intermediary functions.

from the public school system, three local higher education institutions, the City of Madison and the Office of the Mayor, Dane County, the local chamber of commerce, the regional workforce development board, and prominent health care employers. The Madison Metropolitan School District (MMSD) is the main driver of pathway activity in Madison.



Central Ohio

Columbus State Community College has steered most of the early work in the Central Ohio region's pathway work

and serves as the *de facto* intermediary connection between employers, K-12 partners, and higher education. The college created an office, led by the Superintendent of School and Community Partnerships, to serve as the primary convener and coordinator of all pathway work in the region. CCSC also established a new connection to the Central Ohio Compact, a regional coalition of chief executives from education and industry partners that formed in 2011 to increase postsecondary attainment rates of Ohioans.

By developing and strengthening different approaches to mobilizing diverse stakeholders toward a common pathways goal, GLCCPP is both codifying multiple approaches to this critical intermediary work and elevating key learnings across different approaches to it. This will

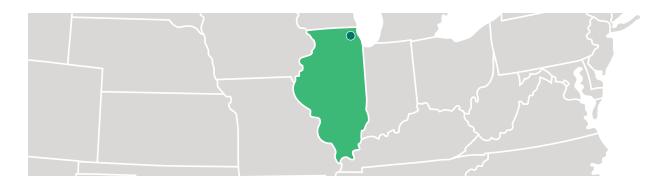
ultimately help to spread and scale pathway systems across the Great Lakes region and the country.

Promising Practices in GLCCPP

While the work of GLCCPP has only been underway for a few years, it already holds valuable lessons for other communities and the broader field of college and career pathways. Both before GLCCPP started and since, cross-sector partners in each of the four communities are seeking solutions that are essential in order to create and provide young people in their regions with equitable systems of pathways to successful adulthood.

Within GLCCPP, there are many promising examples of new and emerging capacity to provide high-quality pathway experiences to students—especially for historically underrepresented students. Each community has made strategic decisions aimed at increasing equity and access by enhancing their leadership and governance structures, creating stronger alignment between secondary and postsecondary education, and developing systems to deliver work-based learning opportunities.

The stories that follow both celebrate the promising advances of GLCCPP communities and, candidly, share the headwinds these partnerships have faced in crafting the new social compact envisioned by the pathways movement.



NORTHWEST SUBURBS OF

CHICAGO, ILLINOIS

Sharp Rise in Dual Enrollment Benefits Northwest Suburbs Youth, Especially Students of Color

The Northwest Educational Council for Student Success is a secondary-postsecondary collaborative that partners with organizations that serve students in Chicago's Northwest Suburbs, including Harper College, William Rainey Harper College (District 512), Township High School Districts 211 and 214, and Community Unit School District 220. NECSS is a rapidly emerging national leader in the movement to develop equitable systems of high-quality pathways that prepare students for success in their postsecondary endeavors and beyond. A key element of their college and career pathway system is to expand opportunities for students to complete early college credit through AP and dual credit courses. The Northwest Suburbs has succeeded in increasing the number of students who are taking courses for early college credit—at little or no cost to students with a priority on participation of students of color and students from low-income backgrounds.



SCHOOLS

Township High School District 211

Township High School District 214

Barrington Community School District 220



COLLEGE PARTNER

Harper College



INTERMEDIARY

Northwest Educational
Council for Student Success



27,000

High school students served

A College Makes a Bold Move to Expand Dual Credit Course-Taking

When President Kenneth Ender began his tenure at Harper College in 2010, his first calls were to the local school district superintendents to set up a meeting. They ultimately united their efforts into what has become NECSS. After they built infrastructure and aligned resources, they engaged Harper's provost and the associate superintendents of the school districts in this process. Subsequently, they brought their respective teams and instructors on board. In the spring of 2012, the NECSS intergovernmental agreement was approved. Its purpose: to provide a framework for offering coordinated college and career readiness programs and services for high school, college, and adult learners who reside within a member district.

In 2014, the college's provost announced to deans and department chairs that Harper would support an ambitious expansion of early college credit opportunities through dual enrollment courses in collaboration with the region's high schools. Since the late 1990s, the districts and Harper had offered a limited number of dual enrollment courses. The provost's message set in motion a significant expansion in the number of opportunities high school students could pursue, which reduced

the time and cost they would need to attain a college degree. Harper College Associate Provost, Brian Knetl recounted the impact the announcement had on the college community: "It was pretty clear the provost's message would make dual credit a significant priority for the college from that point forward." Harper backed up its commitment to dual credit by allocating staff time to this effort, including a full-time dual credit coordinator and half-time support for a transition advisor.

According to Knetl, Harper College sees its dual credit commitment as a wise investment, as first-year students arrive better prepared for their college-level work. But support for dual credit and pathways in general is also integral to the college's commitment to a stronger region, said Knetl.

"Increasing college and career awareness and readiness to succeed beyond high school is good for our individual institutions, but also preparing our postsecondary youth to experience success whether they enroll at Harper or another college or career training program."

To facilitate the expansion of high-quality dual credit, Harper developed a review process for high school partners that want to offer courses for dual credit; it includes a review of teacher credentials. Once approved, a team of representatives from K-12, higher education, and NECSS comes together to ensure the quality of dual credit courses, by discussing the development of the course, alignment of instructional content, and professional development and performance standards for teachers.

The heightened commitment to early college credit in the Northwest Suburbs has sparked significant gains in student participation in both AP and dual credit courses (see Increased Equitable Student Access and Outcomes). The message about the value of early college credit has clearly gotten through to the educators, parents, and students of the Northwest Suburbs.

Increased Equitable Student Access and Outcomes

- ▶ 12,396 sophomores, juniors, and seniors from the three districts were enrolled in at least one early college course, an increase of 11.4 percent (1,272 students) since 2015-16
- ▶ **56 percent** of these students took one or more AP courses
- ▶ In 2017-18, over 60 percent of all students in grades 10 through 12 participated in at least one college-credit-bearing course
- ▶ Enrollment gains for black and Hispanic students outpaced others across the three districts, increasing by 29 percent in three years (from over 2,800 in 2015-16 to over 3,600 in 2017-18)
- ▶ District 211 showed a **51 percent increase in students of color participating** in early college course participation—from 969 to 1,464 students
- ▶ In District 214, **64 percent** of all students in grades 10 through 12 (5,862 students) enrolled in early college courses
- ▶ One district showed over **24 percent growth** in all students taking early college courses over three years (District 211)

Source: Illinois State Board of Education Report Card; 2015-16, 2016-17, 2017-18; www.illinoisreportcard.com

Navigating Headwinds

It's not uncommon for college faculty to raise concerns over efforts to expand dual credit courses, and Harper College was no exception. The pushback from some professors and department chairs was based on concerns that: (1) a surge in dual credit courses taught by high school teachers could drive down enrollment in first-year introductory courses offered at the college, and (2) the college would have limited jurisdiction over instructional quality and performance expectations for college credit-bearing courses taught offsite. In reality, the college has experienced no discernible falloff in enrollment due to dual credit offerings.

The concern over quality control is more complicated. Knetl feels the best strategy to address this concern is to build strong professional relationships between college and high school faculty:

I believe the key is that, once we approve a course for dual credit, we need to get the college and high school teaching faculty together to build those professional relationships and shared expectations about teaching and learning standards. Currently, some departments do this very well; others require more support.

Under its newly approved strategic plan, NECSS assigned a team that is responsible for ensuring strong engagement between high school and college instructors.

A 2017 report by the Institute for Education Sciences' What Works
Clearinghouse also strengthened the case for dual credit. The WWC Dual
Enrollment Programs Intervention
Report synthesized existing high-quality research studies. It found solid empirical support for dual enrollment based on key student outcomes: high school academic achievement, high school completion, college access and enrollment, college degree attainment, and college credit accumulation.⁷

Partner Districts Expand Dual Credit Offerings

NECSS

For 10 years, NECSS has served as the backbone for the collaborative planning needed to expand pathways, including industry-aligned early college credit offerings. Committed to expanding the region's capacity to prepare youth for successful transition to careers and society, NECSS pursues its mission "to develop programs, share talent and data, and leverage joint resources to ensure that every elementary, high school, and college

graduate will have the opportunity to be prepared for a global society, 21st-century careers, and postsecondary readiness/ success."8

NECSS Vice President Kenya Ayers, a former academic dean at Harper, pointed out that a critical advantage of the NECSS model is its organizational structure. "The NECSS board includes the president of Harper College and superintendents of the three partner districts, and myself as chair," she said. "I can't emphasize enough the importance of having the CEOs of these four education organizations setting the strategic vision for the work."

The second level of NECSS leadership structure, the Coordinating Council, is responsible for executing the NECSS board's vision through a committee structure that governs specific domains such as data, communications, professional development, and student support. The council includes the provost of the college, Harper's vice president for workforce solutions, the associate superintendents of Districts 211 and 214, the assistant superintendent of District 220, the regional education for employment director, and the NECSS vice president.

Finally, the operational planning of dual credit is the responsibility of the Power of 15 team (the name refers to the regional goal that all high school students earn at least 15 college credits before graduation). That team includes the associate provost of the college and instructional leaders from three districts. Knetl explained that one of the keys to the Power of 15 committee is the trust the partners have cultivated over the years:

The four of us have developed a strong bond and good communications practices. As we do our work through NECSS, [we] don't hesitate to pick up the phone and have honest conversations with each other. When issues come up, we try to tackle them right away.

Township High School District 214

Harper's renewed commitment to dual credit in 2014 dovetailed with the local high schools' longstanding effort to design coherent and rigorous pathways. Township High School District 214 is the largest high school district in the state of Illinois, serving 12,331 students. Six high schools and one specialized school offer 44 programs of study across 16 nationally recognized career clusters.

Dan Weidner, director of academic programs and pathways for District 214, described the district's underlying philosophy for pathways:

We're determined to be very intentional about the work and believe it starts by introducing career exploration in the middle grades. We want our students to progress through our early college pathways with a purpose; understanding the connections between their possible career interests, their high school program of study and internships, capstone courses where they can earn early college credit, and options available to them after [high school] graduation.

District 214 aims to expand pathway opportunities for students who are typically underrepresented in college and quality career-credentialing programs. The district will soon launch a comprehensive data platform that will carefully monitor student progress across the pathway continuum for this purpose. NECSS also released a data dashboard in the 2018-19 academic year that allows for longitudinal tracking of students. The data can also be disaggregated internally by various student types—affording the opportunity to address equity gaps.

What Is a Program of Study?

A program of study—such as Shayla's health sciences career cluster—articulates a coherent sequence of courses (at minimum three courses) and, in some cases, additional educational experiences such as work-based learning in a defined career field.

In a college and career pathway system, programs of study align secondary and postsecondary coursework and graduation requirements. The course sequences should include strategic early college credit courses that provide access to a broad range of potential subbaccalaureate and baccalaureate degrees and credentials in an industry sector.

Source: GLCCPP Quality Indicators for Pathways Design and Implementation; https://jfforg-prod-prime.s3.amazonaws.com/media/documents/GLCCPP_Quality_Indicators_2.0_2019.pdf

Township High School District 211

Located about 25 miles northwest of Chicago, Township District 211 serves 12,000 students in five high schools and two alternative high schools. Danielle Hauser, District 211's director of instructional improvement, reported that the district's sustained focus on equity has yielded important gains in dual credit enrollment for Hispanic students:

Three years ago, we partnered with Equal Opportunity Schools to close equity enrollment gaps by expanding the enrollment of students in our AP and dual credit courses. Now we're seeing significant increases in AP enrollment of our Hispanic students relative to their enrollment in our general student population. In fact, District 211 received the AP Honor Roll for the fourth time out of College Board's nine-year history. Regarding our dual credit courses, District 211 continues to expand enrollment and currently has no equity gaps between student groups.

Andrea Messing-Mathie, former deputy director of EdSystems—one of the technical assistance organizations working with the GLCCPP communities—noted that, through very specific outreach and support, District 211 also achieved significant gains in the enrollment of students who have disabilities in dual credit courses.

Barrington 220 School District

Unlike its two partner districts, Barrington 220 operates as a unified pre-K through grade 12 school district with five elementary schools, two middle schools, and a single high school that serves 2,900 students. Currently, 73 percent of District 220 graduates have earned college credit either through AP courses or dual credit. According to Assistant Superintendent for Teaching and Learning John Bruesch, the district aims to increase participation by another 7 to 12 percentage points by 2020. Working with the Equal Opportunity Schools, District 220 is using data to identify systemic barriers to expanding dual credit opportunities for the remaining 27 percent of its seniors who graduate without college credit. According to Bruesch, the district is using the review to reveal "what adult issues might be holding us back."

The Road Ahead

Expanding Access to Early College Credit in the Northwest Suburbs

NECSS is targeting a number of priorities to expand its early college career pathway work over the next three to five years.

First is the commitment to accelerate progress on regional equity goals through increased sharing of strategies and tools across the region. Several partners report important advances in data systems, dashboards, and utilization practices. The strategic use of comprehensive, disaggregated data could help determine causes of persistent gaps in access to dual credit courses.

Second, Harper College is committed to deepening professional relationships between high school and college faculty to ensure that dual credit courses in high schools are high-quality and well-supported by academic departments at the college. This includes professional development to prepare the next cohort of high school teachers who are qualified to teach college-level courses.

Finally, NECSS will continue to improve the quality of communication to parents and students about the value of college and career pathways, in general, and early college credit courses, in particular. Through the collective efforts of NECSS partners, the Northwest Suburbs are moving into the vanguard of the national movement to create high-quality secondary-to-postsecondary career pathways. Several key elements have enabled this work and inspired confidence in plans to extend pathways opportunities to serve more students—especially the region's students of color and students from low-income households:

A high-functioning, secondarypostsecondary intermediary organization whose partners are united on a mission to achieve equitable learning opportunities and outcomes for all students

A higher education partner that is committed to working side-by-side with high school partners to better prepare students for postsecondary success as part of its broader mission to contribute to regional social and economic development

High school district leadership that is committed to building public awareness and support for high-quality pathways, expanding access to dual credit, developing new program designs that are aligned with postsecondary opportunities, and using data to inform continuous improvement

Policy Spotlight

Illinois' Postsecondary and Workforce Readiness (PWR) Act is an example of a strong state policy that supports high-quality pathways.

Enacted with bipartisan support in 2016, the PWR Act applies a student-centered and competency-based approach to support Illinois students in preparing for postsecondary education and future careers. The PWR Act implements four aligned strategies that require coordinated efforts among school districts, postsecondary education institutions, employers, and other public and private organizations. These strategies were developed through an inclusive, multiyear process led by the P-20 Council's College and Career Readiness Committee to address key barriers to the successful transition of Illinois high school students into college and careers:

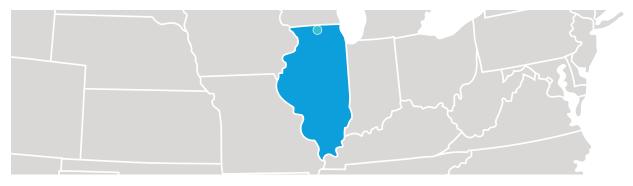
Postsecondary and Career Expectations (PaCE) Framework

Pilot of competencybased high school graduation requirements

College and career pathway endorsements on high school diplomas

Transitional math instruction to avoid remediation

For more information, visit www.pwract.org.



ROCKFORD, ILLINOIS

From Career Academies to Aligned College and Career Pathways in Rockford, Illinois

Anisha Grimmett brings a unique perspective and set of professional experiences to her work as executive director of Alignment Rockford, an education support organization and key partner in that city's effort to prepare youth to successfully transition to college and the workforce. An engineer by training, Grimmett is applying her 22 years in the aerospace industry as a project management and human resources specialist to help design a seamless system of learning for Rockford youth. Her work in the private sector also taught her what it takes for young people to enter and succeed in the workforce: a solid academic foundation, knowledge of rewarding career paths, and workbased experiences for all students.

As a graduate of Rockford Public Schools and active member of her community, Grimmett respects the uphill battle many young people face in navigating the path from high school to college or the workforce. "As a community, we are accountable for connecting support systems and resources to create impactful interactions for our students that will help them transition successfully to college and work. We must ensure that



SCHOOLS

Rockford Public Schools



COLLEGE PARTNER

Rock Valley College



INTERMEDIARY

Alignment Rockford



7,800

High school students served

these college and work opportunities are accessible and equitable to all students no matter their background," she said.

This is the story of one community's effort to marshal the public will and resources to design a system of integrated learning opportunities that prepare its youth for productive and fulfilling adulthoods.

Rockford Designs a System of Pathways to Increase Educational Equity

Located 90 minutes west of Chicago on the Rock River, Rockford is the third-largest city in Illinois. By the mid-20th century, the city had grown to become an important manufacturing center, specializing in the production of heavy machinery and

tools. But like other cities
in the industrial Midwest,
Rockford fell on hard times
with the decline of heavy
manufacturing and was
forced to reinvent its regional
economy. Today, the dominant
industries of Rockford include
the aerospace, automobile,
and health care sectors, which
together have fueled demand for a highly
skilled workforce in the region.

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Rockford Public Schools serves 28,000 students in 47 schools, including four comprehensive high schools. The demographic makeup of RPS students is

approximately one-third each of white, African American, and Hispanic students: over half of all students experience economic challenges. In the face of persistently low graduation rates and large achievement gaps, in 2010 the Rockford community came together to plan the redesign of its approach to high school education. The result was a system in which the schools operate four career academies specializing in business, production, public service, and health at each of Rockford's four comprehensive high schools. All students are enrolled in the academy of their choice. Academies are designed for students to explore a specific career interest, then gain the secondary academic and work-based experiences they need to pursue those careers after

graduation.

"We must ensure that

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equitable to all

these college and

The early years of Rockford's pathways work provided high school students with exposure to career options and specialized coursework. Three years after the academies were first

implemented, Rockford joined GLCCPP and endeavored to refine its approach to pathways in each of the academies and create a more seamless system of learning that connects secondary, postsecondary, and industry-sponsored work-based opportunities.

A Vision for Graduates

One early milestone of this pathways planning process was the community's consensus on defining a discrete and measurable set of skills, knowledge, behaviors, and experiences that constitute the "Profile of a Graduate." Rockford's vision of a successful graduate stands as a helpful framework for the education, civic, and corporate leadership of Rockford to answer the question: What systems, structures, supports, and partnerships are essential to helping students attain these critical skills and experiences?

The Profile of a Graduate outlines three dimensions of student readiness:

COLLEGE READY

GPA of 2.8 and a postsecondary plan; dual credit, AP (3 or higher) developmental math/reading completion, C or higher in Algebra 2 or Math 3; or 1080 SAT, 22 ACT.

CAREER READY

95 percent attendance; 95 percent complete three-course pathway sequence; 100 percent with work-based learning experience; 100 percent with co-curricular experience; and 100 percent with capstone experience

LIFE READY

Digital student profile; 100 percent with 10year plan; 100 percent with community service experience; and 100 percent have a relationship with a trusted adult

Reassessing Career Academies

For their part of the pathway planning process, RPS district leaders completed a top-to-bottom review of their career academies. According to Bridget French, executive director of college and career readiness at RPS, the review started by revisiting the existing pathway structures within each academy, as well as the embedded course sequences for each:

We developed a rubric to look at each pathway sequence and courses within each to help answer three questions: First, is there a strong workforce demand for graduates of the pathway? To answer that

question, we worked with the [U.S.] Department of Labor and our Illinois Department of Employment Security to look at workforce projections. Second, we asked what can we put into place with our college partners and our *industry partners to ensure students* will earn early college credit or industry certifications? Because 65 percent of our graduates enroll at Rock Valley College, they were obviously key to that part of the analysis. And third, we focused on student demand: Which of the pathways and courses were of interest to our students? We did some internal work with focus groups and student surveys to determine interest levels. We examined our existing pathway sequences using those three filters, which led to a tighter and more coherent program of study within each pathway.

In the end, the analysis yielded a revitalized college and career academy structure that offers over 14 pathways in each of Rockford's comprehensive high schools in the following areas:

- Business, Studio Arts, Modern World Languages and Info Technology
- Engineering, Manufacturing, Industrial,
 & Trades Technology
- Human and Public Services
- Health Sciences

College and career academies in Rockford function as small learning communities of students and teachers. Ninth grade is devoted to career exploration; students complete a freshman seminar that exposes them to an array of career options and prepares them to select an academy in their sophomore year. That begins a three-course pathway sequence (one course per year) culminating in students' junior or senior years with courses that yield either dual credit, articulated credit, or an industry certification in their chosen field of study. In addition to their dedicated pathways courses, students' core academic studies are thematically infused with the pathway focus. Beyond the increased cohesiveness and real-world relevance of its pathways system, RPS also added a transitional math course in high school so students can avoid placement in a noncredit-bearing remedial courses in college. The district hopes to add a companion transition course in English / language arts in the 2019-20 school year.

A Renewed Partnership between Rockford Public Schools and Rock Valley College

Pathway planning provided an opening to reinvigorate the relationship between RPS and Rock Valley College, where nearly two-thirds of RPS graduates enroll after graduation. The secondary-postsecondary link was further strengthened by the appointment of RVC President Dr. Doug Jensen in 2016. Throughout his career in higher education administration, Jensen has built partnerships to enrich the social and economic vitality of colleges' surrounding communities. Jensen renewed the college's commitment to work with RPS on college and career readiness goals connected to employer needs and economic development.

RPS and RVC officials meet regularly to plan how to increase high school student access to RVC-approved dual and articulated credit courses and industry credentials. According to Kelly Cooper, executive director of RVC's Engineering Our Future initiative, enrollment in these courses has been trending upward in recent years:

Last year we had 15 sections of dual credit running in our regional high schools. In comparison, this academic year we will have 19. Next academic year we will see a more significant increase. This fall, we have 242 students participating in our Running Start program that allows students to receive an associate's degree here on campus while completing their high school graduation requirements simultaneously. Furthermore, we have just over 100 students taking one or more dual credit classes on campus outside of the Running Start program this fall.

A Pathway in Action

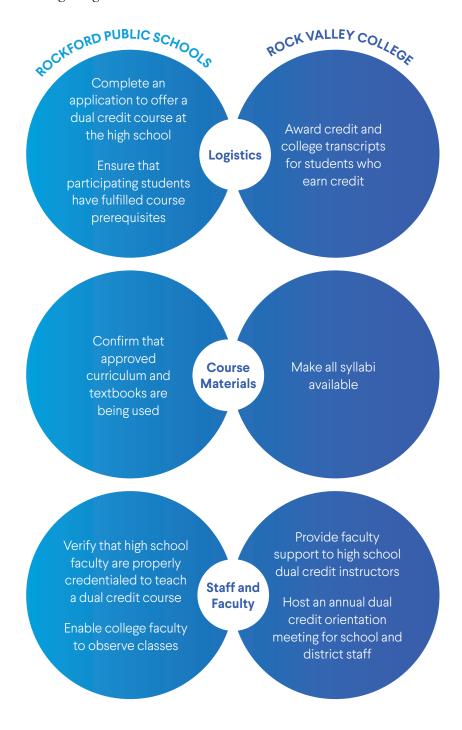
The Law and Public Safety pathway is as an example of a coherent program of study that leads to articulated and dual credit courses for high school juniors and seniors. It is part of the Human and Public Service Academy.

Students who are interested in public safety careers such as police officer, attorney, public administrator, emergency medical technician, and firefighter can take the Law and Public Safety pathway. Following their freshman seminar, sophomores take a course in either criminal law, business, or psychology. Juniors are eligible to take Introduction to Criminal Justice, in which they earn articulated credit at Rock Valley College. During senior year, students take Introduction to Crime Scene Investigation, which is taught by active or retired police officers who are certified to teach in Rockford high schools.

Shared Responsibilities in the Rockford Dual Credit Expansion Process

To facilitate the expansion of dual credit courses available to Rockford students, RVC and RPS signed a memorandum of understanding in February 2019. The "Linking Talent with Opportunity" MOU stipulates the district's and college's respective responsibilities in the dual credit expansion process.

This strong statement of institutional commitments is an important resource for supporting students in attaining the goals in Rockford's "Profile of a Graduate."



Providing a Progression of Work-Based Learning Opportunities for Students

Alignment Rockford supplies much of the infrastructure and support needed to connect Rockford's students with work-based learning opportunities. In the words of Executive Director Anisha Grimmett: "What we're striving for is to provide our students with an integrated learning system that connects our schools, our colleges, the community, and regional employers. And a big part of this system is work-based learning." For the past year, Alignment Rockford has designed and piloted a four-year developmental continuum of experiential learning.

GRADE 9

While enrolled in a freshman career exploration seminar, ninth graders attend a career expo where they have access to over 100 employers that align to the career academies and pathways. Grimmett described the expo:

We stage our annual expo in a local sports arena and invite most of our major employers in the region. Companies set up kiosks and spend the day answering students' questions about career opportunities, entry-level requirements, and what to expect in terms of starting salaries and opportunities for advancement. This event helps our students explore different careers within our community and choose their pathway for their sophomore year.

GRADE 10

During sophomore year, every student participates in a site visit to a local company or agency in their chosen pathway. "This is a chance for students to continue to hone in on their career interests and experience on site what's expected of employees and what the work environment looks like," explained Grimmett.

GRADE 11

As juniors, students spend four hours job shadowing a professional in their field of interest. This includes a tour of the facility and an opportunity to follow an employee and experience their everyday tasks. Students have time to ask their host and other employees questions.

GRADE 12

Finally, in their senior year, students are expected to complete a capstone project as part of an English elective course, a formal internship or apprenticeship, or independently in their chosen career area. These capstone projects connect them to a workforce or community need and help students develop project management and problem-solving skills.

Taking the System to Scale

Alignment Rockford continues to finetune and pilot aspects of this work-based strategy in hopes of having the full array of work-based learning opportunities operational in the 2020-21 school year. On the enormous undertaking of bringing this system to scale, Grimmett said:

What keeps me up at night is the prospect of extending these opportunities to all of Rockford's 10,000 high school students and to do that while adhering to the highest standards of quality. To ensure a high standard is met, we are currently designing a platform that will allow us to seamlessly connect students to our community through technology.

The Road Ahead

The Systemic Capacity and Public Will to Prevail

As Rockford prepares to scale its pathways work, it faces many of the same challenges as peer communities that are engaged in similar efforts to ensure postsecondary readiness and success for all students. District leaders are working to secure broader teacher support for pathways through strategies such as having content area specialists provide professional development about how to infuse career academy themes into traditional academic content. Likewise, continuing the steady expansion of dual credit courses will

require a significant number of teachers to invest in becoming credentialed dual credit instructors in the school district.

Realizing the vision of Rockford's Profile of a Graduate will require an expansion of dual credit and similar early college credit offerings. The MOU between RPS and RVC provides a clear framework and roadmap for expanding dual credit capacity. Several RPS leaders urged RVC to revisit some of its course requirements and prerequisites for some pathways. In French's words: "We just need to make sure, moving forward, that we're doing everything we can to take down any unnecessary barriers to dual credit access for our students."

As Grimmett said, the prospect of scaling its work-based learning opportunities to 10,000 students is daunting for Alignment Rockford's staff of three (who also support a major initiative in early childhood education). The prospect of building capacity to effectively connect all Rockford high school students with meaningful work-based experiences is also daunting. Alignment Rockford has hosted a successful ninth grade career expo for several years. However, the more labor-intensive components for students in upper grades involve coordinating site visits, job shadow experiences, and work-based internships, and will require further system building, recruitment, and technology-based solutions to fulfill the needs of 2,500 students per grade.

In the face of these challenges, leaders of Rockford's pathways partnership are buoyed by early wins such as significant progress in increasing pathways participation for students who have special needs, who make up 15 percent of Rockford's enrollment. French noted the steps the district took to address this equity priority: "This year we hired an academy coach who focuses solely on ensuring our special needs students have access to academies and pathways especially as it relates to the work-based learning component. This has really been a game changer for us."

To weather the expected challenges, Rockford will need to rely on its base of new structures and partnerships, renewed collaborations and trust, and steady support from industry and civic leaders. It has a number of strengths that others may consider emulating:

- Rockford's intensive effort to involve the broader community in the pathways design work will continue to pay dividends. Public support for pathways across stakeholder groups remains high and the community continues to be actively engaged on pathways advisory boards.
- 2. The renewed relationship and collaboration between RPS and RVC bodes well for the effort to expand dual credit offerings. The MOU provides a strong framework for further progress. Open lines of communication between the college and district official will facilitate the ongoing examination of course requirements for specific pathways.
- 3. Alignment Rockford serves as a steady resource both for community outreach and employer engagement.

 The intermediary has developed, and is now testing, a promising grade-level framework for work-based learning that provides students with increasing exposure to the workplace in their chosen fields of study.

"This year we hired an academy coach who focuses solely on ensuring our special needs students have access to academies and pathways especially as it relates to the work-based learning component. This has really been a game changer for us."



MADISON, WISCONSIN

The Madison Community Collaborates to Launch Personalized Pathways

In October of 2013, a report from Race to Equity exposed extreme racial disparities in Dane County, Wisconsin: in 38 out of 40 indicators, the region had significantly greater racial disparities for African Americans than the national average. The report spurred self-reflection and an urgency to improve equity in Madison, a community that long considered itself to be progressive, inclusive, and providing excellent education and career opportunities to all of its citizens:

The legacy of slavery and racism, the mismatch between our labor markets and key parts of our workforce, and the fragmentation and underdevelopment of too many of our neighborhoods of color—these are all large and powerful drivers of the vast inequalities that separate white and black Dane County. But they are not the whole story.

The whole story has to include a broader and more forthright evaluation of the composition, priorities, policies, training, and practices of many of the county's majority-dominated institutions,



SCHOOLS

Madison Metropolitan School District



COLLEGE PARTNERS

Madison Area Technical College

University of Wisconsin—Madison Edgewater College



KEY PARTNERS

UW Health

Greater Madison Chamber of Commerce

Workforce Development Board of South-Central Wisconsin

City of Madison

Dane County



7,300

High school students served

especially those that directly influence the future education, employment, opportunity, status, achievement, security, health, and empowerment of Dane County's growing populations of color.¹⁰

The Madison Metropolitan School District (MMSD) found itself facing a situation in which fewer than 60 percent of its African American students were graduating from high school on time. "We knew we weren't serving all of our students well in their high school experience," said Cynthia Green, MMSD's director of secondary programs, "so we wanted to really reconceptualize the high school experience so that all of our students were not only graduating but were on a really clear postsecondary success path."

In response, the district crafted a call to action that outlined its vision to redesign its four comprehensive high schools with a clear lens on equity for all students. The vision included a "personalized pathways" option for students in all four of Madison's comprehensive high schools. This marked the beginning of Madison's journey to create multiple pathways to support students' successful transition to postsecondary education or training and rewarding careers.

In 2014, the school district and its civic partners responded to this call to action with a community-wide planning and design

process that resulted in health science pathways that admitted their first ninthgrade cohort of 415 students across four schools in the 2017-18 school year.

They built a coalition to design the program and created an anchor team of partners to formalize its work and provide intermediary functions that support pathways. The four original members of the anchor team are: MMSD, the Greater Madison Chamber of Commerce, the Workforce Development Board of South-Central Wisconsin, and Madison Area Technical College. These founding partners played key roles in the initial community outreach and design plan for Madison's personalized pathways.

Later, new civic and postsecondary partners joined the anchor team, including: the City of Madison, Dane County, University of Wisconsin-Madison (UW-Madison), UW Health (a large local health care provider that has ties to the University of Wisconsin), and Edgewood College. According to Jen Wegner, MMSD's director of personalized pathways, the expanded anchor team adds important new capacity and helped to clarify decision-making structures: "We saw it as an opportunity to be more intentional about the role of each member, of the levels and connections between each, and how we all work in the best interest of our students."

The anchor team uses a three-tiered organizational structure to provide intermediary support for personalized pathways:

Executive Team

The executive team is comprised of chief executives of the partner organizations and meets twice a year to set overall goals and strategic priorities for the pathways partnership

Action Team

The action team is comprised of senior managers of partner organizations and develops strategies and work plans to achieve pathways goals

Day-to-Day Team

Much of the day-to-day implementation occurs through three subcommittees— Secondary-to-Postsecondary Pathways, Student Supports, and Experiential Learning—each focused on a vital system component for implementing personalized pathways

The Design of Personalized Pathways

At the district level, MMSD reserved a full year for high school faculty to plan how they would adjust their course content and instructional approach to blend in health services. Wegner explained, "We really turned to our best and brightest teachers who were ready and willing to embrace this new way of teaching and learning. We asked them to step up to serve as our pioneers in personalized pathways." MMSD committed to giving its teachers the time and space to examine how authentic day-to-day teaching and learning would change in the context of the health services theme.

Another aspect of the planning and implementation of pathways involves collaboration between MMSD teachers. and faculty at area colleges. MMSD teachers and Madison College instructors meet at least annually to ensure that high school staff align their course content and standards to the rigor and expectations of college-level work. With a goal of ensuring that students are prepared for dual credit coursework, Wegner highlighted that "... those discussions focus on making sure our coursework leading up to those opportunities are solid, and that requires connecting the college faculty with our staff at the K-12 level."

The Secondary-to-Postsecondary
Subcommittee of the anchor team played
an important role in building health
services pathways that align to real-world
industry needs. According to Bridgett
Willey, director of UW Health's Allied
Health Education and Career Pathway:

The subcommittee mapped out over 60 academic and career pathways to careers in the health services sciences via the work of our Secondary-to-Postsecondary subcommittee. We also convened a session that included professors of anatomy, physiology, and sciences from our two- and four-year colleges and universities, teachers from the health services pathway in MMSD, and representatives from industry to brainstorm a list of competencies and skills that every student in the pathway should develop in high school in order

to be successful in postsecondary education and training.

While these early conversations between content area faculty and teachers prioritized secondary-to-postsecondary alignment in personalized pathways, the prospect of scaling these discussions to include other disciplines is daunting. Schauna Rasmussen, dean of workforce and economic development at Madison College, emphasizes this challenge:

I think the anchor team has produced some really strong plans for alignment and articulation between the high school and college curricula. Where this all gets more challenging is with the implementation of those plans in schools and working with teachers to align their course content and methods to better prepare their students for success in college-level work.



How does the new pathways design change high school teaching and learning on a daily basis? Wegner notes that the first big change is that students who are in pathways form small learning communities in each of the high schools. "The learning communities consist of pathways teachers and about 100 students who form a small learning family," she said. "Teachers meet to discuss what's happening in each classroom, connections across classrooms, and supporting all students within the cohort."

A typical ninth grader's course schedule has not changed radically. Students still take their regular core academic courses of U.S. History, Math, English I, Science, Physical Education, and an elective.

Personalized pathways students, however, also take a health science exploration elective to learn about various careers in the health services field. While the course titles are unchanged, MMSD is challenging all its teachers to infuse health services into core course content by completing an integrated project in the health sciences field. Cynthia Green added:

Our high school teachers are very strong in their content knowledge, but we're really asking them to rethink their instructional delivery. And we're pulling on our anchor partners to help deliver the health sciences professional

development to help teachers make authentic connections. UW Health has been really involved and a tremendous asset in connecting our teachers with health services professionals in clinical settings.

Wegner elaborates on MMSD's commitment to professional development for pathways:

A foundational part of our work is elevating for our high school staff connections between the core academic courses and the health services thematic cluster: How does the health services theme connect to English I, our ninth-grade English course? How does it connect to a World History, the 10th-grade history course? A key component to our pathways work is experiential learning—but not just for our students, for our high school staff as well.



Community Partners Contribute to Student Learning

In addition to lending their professional expertise to pathway implementation, anchor team partners provide experiential learning opportunities that build career awareness for students enrolled in the health services pathways. UW-Madison developed a tour for all ninth-grade pathways students to orient them to the range of career opportunities in the health services field as well as the educational requirements of each. The university also offers a paid, for-credit, health services summer internship for select students on the UW-Madison campus that includes information about admissions and financial aid processes and resources.

As the integrated health system for UW-Madison and operator of 6 hospitals and 87 outpatient clinics, UW Health is the region's largest employer in the health services sector. UW Health's flagship initiative for MMSD's health services pathways is the Health Occupations and Professions

Exploration program, a one-day seminar in which students work with a college student mentor and learn about the more than forty career paths in health services. UW Health also offers paid summer

internships for underrepresented high school students to work in a clinical or nonclinical setting under the supervision of a professional staff member.

As a member of the anchor team, the City of Madison plays a critical coordinating function for personalized pathways by providing internships and other experiential learning opportunities for MMSD students. Former Mayor Paul Soglin directed city agencies to offer workbased learning opportunities for pathways students and encouraged the same from community-based organizations and companies that do business with the city. Wegner summed up the impact of partner support: "When you're working elbow-

to-elbow with partners on the work, there's a shared ownership both across and within our organizations . . . it's no longer just an MMSD thing."

"When you're working elbow-to-elbow with partners on the work, there's a shared ownership both across and within our organizations... it's no longer just an

MMSD thing."

Industry Steps Up to Support Pathways Students

The Experiential Learning Subcommittee established an industry council that meets

quarterly to develop career exploration and learning opportunities in the health services field. The industry council also creates opportunities to share best practices and build partnerships to expand the region's capacity for experiential learning. Bridgett Willey of UW
Health reported on the subcommittee's efforts: "The Subcommittee created a communication process and online repository that facilitates sharing new requests for work-based learning as well as opportunities that are currently being offered." Likewise, teams of MMSD teachers are working with industry partners to design integrated project work in line with the health services theme.

Pat Schramm of the Workforce Development Board of Central Wisconsin, another anchor team member, is eager for the health services pathways to extend into grades 11 and 12. These grade levels are in "the WDB's wheelhouse," as the WDB's training platform is designed to work with students of various skill levels and advance their attainment of industry credentials.¹¹ According to Schramm, "Our board is laser-focused on making sure that the training that we're doing is credentialbased, and that the credential is aligned with formal credentials at our technical college system." The WDB has also sponsored a Middle College for eight years where, according to Schramm, "We work with seniors in high school who begin their own college experience in September. By the time they graduate as seniors, they have an average of 20 Madison College

credits on their transcript." This puts students on a clear trajectory to earn their first postsecondary credential.

Encouraging Results in Year One

MMSD's research staff recently presented the results from the first year of personalized pathways to the school board. While district researchers urge caution, given that this was the first year of implementation, there are promising results on student participation and academic performance: 12

▶ About one-fourth of all eligible high school students across the four high schools chose to enroll in health services pathways



 Personalized pathways have a higher percentage of students in these categories than the overall ninth-grade cohort

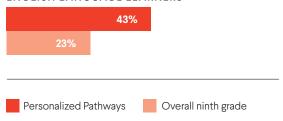
STUDENTS OF COLOR



STUDENTS FROM LOW-INCOME HOUSEHOLDS



ENGLISH LANGUAGE LEARNERS



Using a matched comparison design, researchers found that more pathways students are on track for graduation that their non-pathways matched peers. ¹³
Of critical importance—as the original inspiration for pathways was low graduation rates for African American students—the evaluation found these promising findings: ¹⁴

 Attendance rates for pathways students who identify as black or African American are higher relative to the comparison group



On-track rates are higher for African
 American and white students in pathways
 than their matched non-pathways peers



► GPA results for pathways students relative to the comparison group are higher for African American students



 Pathways students identifying as black or African American had course failure rates four percentage points lower than their comparison group peers



Researchers also found a strong satisfaction with the personalized pathways experience among students, parents, and pathways teachers.

The Road Ahead

Building Public Understanding, Teacher Participation, and Community Capacity for Pathways

There is still a need for greater communication about the purpose and potential benefits of pathways for all students, whether they plan to pursue a postsecondary credential or enter the workforce directly after graduation. This requires targeted outreach to students, parents, elected officials, community leaders, and school staff who are still unclear or unconvinced about the purpose of pathways. Given the focus on equity, MMSD recognizes the need to be particularly vigilant to convey that: (1) personalized pathways are academically rigorous and lead to high-quality postsecondary and career options; and (2) they are not replicating the largely raceand class-based tracking into vocational education that was prevalent in the 20th century. Moreover, the pathway program does not sit alongside the traditional high school classroom instruction rather, it represents an intentional shift in how educators make decisions about the way they deliver instruction based

on needs of students. MMSD's ongoing commitment to using data on pathways' impact can be useful to any future strategic communications effort.

A second priority is ongoing engagement of teachers and other high school staff as personalized pathways expand to upper grade levels and new fields of study. Schauna Rasmussen of Madison College believes it is necessary for high school personnel to take a more active role in planning. "It may be helpful to have school, not just district, leadership in order to move forward," she said. "Without input and a commitment from leadership and teachers in the high schools, we will continue to have the same conversations." The school district continues to recruit pathways "pioneer teachers" who can serve as ambassadors for the work and expand MMSD's capacity for pathways and dual credit offerings.

There is also some concern in the community about the staffing needs that would come as personalized pathways in MMSD expands to other sectors and scales to include all four grade levels at each high school. While this is primarily an MMSD personnel challenge, it also has implications for college and industry partners. For example, as the demand for experiential learning opportunities multiplies and increases in complexity in the coming years, so will pressure on UW-Madison, UW

Health, the WDB, the chamber, and other key providers. The anchor subcommittees are exploring technological solutions to reduce the reliance on person-power as at least part of the solution.

Madison's four comprehensive high schools are now three semesters into the implementation of personalized pathways in the field of health services. There is strong participation from both students and staff, and positive early student outcomes. Notwithstanding challenges related to scaling and some limited public reticence, the following factors bode well for the continued expansion of personalized pathways in Madison:

- The anchor team is a formidable assembly of social and political capital that has forged strong and trusting cross-sector working relationships
- There is a critical mass of support and participation of high school teachers and staff, who act as advocates for the power of personalized pathways for all students
- There is growing capacity and commitment to gather, interpret, and use data to strengthen the implementation of pathways, and to make the case to the broader public that redesigned secondary programs are putting all Madison students on a successful course to attaining postsecondary credentials and launching rewarding careers



CENTRAL OHIO

Central Ohio Commits to Strengthening College Connection and Cutting Senior-Year 'Social Hour'

As superintendent of the Reynoldsburg City Public Schools, Steve Dackin decided to declare war on the senior year. While exaggerating for dramatic effect, Dackin was quite serious about accelerating and improving the transition to college and career, having seen so many students lose momentum at this critical time in their education. "I thought the senior year had become the longest social hour in our culture, both for kids who were university-bound and those who wanted to get started on their careers. I had this harebrained idea that grades 11 and 12 should be integrated with [grades] 13 and 14."

For this to work, however, Dackin and the Reynoldsburg schools needed a willing college partner. When Columbus State Community College (CSCC), the largest two-year college that serves the Central Ohio region, welcomed David Harrison as its new president in 2010, Dackin made his move: "I gave him about a week to settle in, then called to pitch my idea. I got a call back within 24 hours, he was on my high school campus in a week, and the following year we opened 18 college classrooms on one of my high school campuses."



SCHOOLS

Dublin Coffman High School
Dublin Jerome High School
Dublin Scioto High School
Marysville Early College High School
Metro Early College High School
Metro Institute of Technology
Central Crossing High School
Franklin Heights High School
Grove City High School
Westland High School
South-Western Career Academy
Whitehall-Yearling High School



COLLEGE PARTNER

Columbus State
Community College



INTERMEDIARIES

Columbus State
Community College
Educational Service
Center of Central Ohio



13,200

High school students served

A Region Unites Around a Vision to Boost Adult Educational **Attainment**

That early work in Reynoldsburg City marked the beginning of a sweeping collaboration among regional colleges, K-12 systems, and employers, with an eye toward increasing degree and credential attainment in the 11 counties of the Central Ohio region. Given the region's high density of colleges, universities,

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and industries, CSCC President Harrison saw an opportunity to strengthen the talent pipeline to prepare the region's young adults to enter the workforce and contribute to local social and economic vitality through a coordinated pathway approach.

In 2014, the region received a \$7 million "Straight A" grant to

design, implement, and scale pathways in districts across the entire region and implement a data system to track progress. Following this investment, in 2015 CSCC was awarded an \$11.5 million Investing in Innovation (i3) grant from the U.S. Department of Education to scale early college strategies in the region with the college as the hub for the work. When

Dackin retired from his superintendent post in Reynoldsburg City in 2014, he joined CSCC to lead the college's pathways initiative and run the Central Ohio Compact.

This emphasis on college attainment complemented the momentum that began with a commitment by the Lumina Foundation to increase the national rate of adult degree and credential attainment

> to 60 percent by 2025. The initiative included a statewide investment in Ohio, among other cities and states. The Central Ohio Compact, which formed in 2011, mobilized a coalition of 55 education partners and 25 industry partners, to embrace the 60 percent attainment goal as its collective North Star. In turn, the state of Ohio upped the ante by setting its "big goal" at 65 percent.

Central Ohio's current attainment rate is 44 percent; filling the talent gap will require 1.7 million more young people and adults in the region to attain a postsecondary certificate or degree by 2025.

To supplement the efforts of the Compact, CSCC launched the Workforce Advisory Council in 2015 to provide a mechanism

to coordinate industry engagement in pathways work. The WAC is led by CSCC and comprised of the chief talent officers from the 25 top employers in the region, representing a wide spectrum of job sectors including financial services, insurance, health care, law, customer care, logistics and distribution, information technology, hospitality, and education. Executive in Residence, Workforce Innovation, Todd Warner noted that "by 2015 we had reached an inflection point with our K-12 and college collaboration, and it was time to add the third part of the equation, the employer side."

An Industry-Led Pathways Initiative

Input from these industry leaders yielded important early benefits for CSCC students. Having identified a core set of field-specific job competencies, CSCC committed to plan two new academic pathway opportunities, in addition to the wide array that they already offered: (1) a trio of certificated programs in digital technology, and (2) the five-semester modern manufacturing program, which is based on a work-study model that leads to an associate's degree in electromechanical engineering technology that can lead to high-paying, family-supporting jobs.

Warner explained how the planning process for digital technology coursework unfolded:

Based on discussions that started in the WAC meetings, a planning team spun off, led by Nationwide, a Fortune 100 company, who offered to be our development partner. The Nationwide-CSCC team spent nine months doing program development in each of three specialized areas of digital technology: cybersecurity, data analytics, and software development. We basically came up with a menu of competencies our graduates would need to enter each of these fields. Then we stepped back and asked, what courses do we already offer to satisfy those competencies and what new ones do we need to build?

After completing a pilot proof of concept phase, the college started enrolling students in the certificate programs in 2017. Two of the programs are six months long and the third is one year.

Warner described the scope and sequence of the modern manufacturing work-study model:

This is a five-semester program design that combines college curriculum with part-time paid employment at a partner company such as Honda. The students begin two full-time,

academically intense semesters of Columbus State coursework. Near the end of the second semester, students and partner companies engage in an interview event designed to match companies with students that have a high potential to succeed within their specific organization. Beginning in the third semester, students are hired by the company through federal work-study funding. Over the course of the next three semesters, students reduce class time to two days per week and begin working at the facility three days per week as paid part-time employees. At the end of the five semesters, students walk away with an electromechanical associate degree, paid work experience, enhanced technical skills, and potential full-time job offers.

The Compact made a critical early decision to ask industry to lead the pathways work by identifying the essential skills that young people need to succeed in different industries. This challenged the college to review its programs of study to ensure they align with industry standards and expectations. However, to realize a full system alignment for a grades 9 through 14 pathways vision, local high schools would need to follow suit and also realign the design and approach to their secondary pathways.

So, have CSCC's partner high schools made progress on aligning their programs of study with industry needs? Dackin's answer is, "yes, no, and maybe." One definitive "yes" is the Dublin City Schools, one of the five Ohio districts that currently participates in GLCCPP.

One District's Bold Plan to Expand Pathways

Located about 20 miles northwest of downtown Columbus, Dublin City
Schools serve about 16,000 students,
including about 6,000 who attend three comprehensive high schools. According to the most recent Ohio School Report Card,
12 percent of Dublin City Schools students are from low-income communities, 9
percent are English language learners, and 39 percent are students of color, the majority of those being Asian and Pacific Islanders.

For over 20 years, Dublin City Schools have offered two academy pathways for its high school students, a Teacher Academy and Young Professionals Academy. Craig Heath, Dublin's director of secondary education, recalls the critical choice the community had to make when faced with a projected increase in high school enrollment: "We had reached a crossroads about four years ago when we as a community needed to decide what to do about our need to increase capacity for our secondary program. The choice was

whether to build a fourth comprehensive high school or pursue a different instructional model for our secondary students."

Dublin City Schools turned to trusted regional partners to assist with data analysis and community engagement for its secondary education plan. Heath described the payoff of the district's longstanding relationship with CSCC and the Central Ohio Compact: "The Central Ohio Compact connected us to Columbus 2020, which is our regional economic development agency that does great work in projecting future labor market demand." Columbus 2020's analysts helped inform the planning of Dublin City Schools' expanded range of academies.15 The district added four new academies that are all closely aligned with the future demand of the region's top employers: biomedical research, business, engineering, and information technology.

Dublin City Schools sought to both educate its community about the purpose and benefits of pathways and engage residents and other stakeholders in designing the new system. To do so, the district turned to the Education Service Center of Central Ohio, which provides technical support to 42 local school districts. ESCCO helped design and implement an extensive community engagement process that included over 90 community forums.

The community decided to house all six of the district's career pathways academies on one new, dedicated campus. Students take their core academic courses at their home school campuses and travel to the dedicated campus every day for their pathways academy courses. When it opened its main pathways academy campus in school year 2017-18, Dublin City Schools doubled its pathway academy enrollment to 500 students. It currently has the space and capacity to accommodate a total of 1,000 students, which is about one-third of the total number of juniors and seniors in the district (academies are designed primarily for these grades).

Heath highlighted how deepening the district's partnership with CSCC benefits students in the long term: "What's really exciting about our new IT academy is we're working with CSCC on a sequence of six courses, which would allow our students to graduate with one full year of college credit courses toward an associate's degree in IT."

Ohio's Favorable State Policy Environment

Education and workforce leaders in Central Ohio point to a number of recent state policy initiatives that help local and regional innovation take root. According to Dackin, "Ohio has really good state policy when it comes to educational attainment and workforce development; this allows the work to flourish and accelerate and, I really think, puts us ahead of the game in respect to many states."

In 2015, ESCCO's Navigating Central Ohio's College and Career Readiness System report detailed several key actions taken by the state legislature that support the scaling of a pathway strategy in Central Ohio: 16

 Ohio's College Credit Plus program has become a vital and effective component of the state's integrated strategies to enhance students' college and career readiness and postsecondary success.
 Through this program, eligible middle and high school students can take dual enrollment college courses at no cost to them and earn high school and college credit that appears on both their high school and college transcripts.

- Ohio's updated learning standards are underway with new end-ofcourse exams to measure subject matter mastery in high school. These new exams and other independent assessments also are being used to measure readiness for college and careers.
- Colleges and universities have come together to develop performance-based funding formulas and remediationfree standards. The state has worked with higher education institutions to reevaluate the effectiveness of developmental education programs.
- Since 2012, Ohio's higher education institutions have complied with statutory requirements to assemble planned pathways that will allow students to complete a traditional bachelor's degree in three years; many of the plans rely on students' attainment of college credits while in high school.

Want to Learn More about Policy in Ohio, Illinois, and Wisconsin?

Check out JFF's Supply, Demand, and Quality: Dual Enrollment and Teacher Credentialing in the Great Lakes Region for a deep dive into state policy related to dual enrollment in the GLCCPP communities.

Available at: https://jfforg-prod-prime.s3.amazonaws.com/media/documents/Dual_Enrollment_and_Teacher_Credentials_Great_Lakes_FINAL.pdf

Early Equity Gains in Central Ohio

In its quest to increase educational attainment, Central Ohio leadership points to recent promising gains in learning opportunities and outcomes for underrepresented students (see Improved Outcomes for Underrepresented Students).

Still, leaders in Central Ohio acknowledge that a lot of challenging work remains in order to reach the region's North Star of 65 percent degree attainment. Dackin said it's imperative that "we continue to engage with our higher education, industry, and K-12 partners, to demonstrate progress to date and to further illustrate that our investment in pathways, student and family supports, and workforce development is all about increasing economic mobility for individuals and the overall vitality of our region."

For Central Ohio to continue these gains, the region must provide every student with individualized supports that better position them to succeed. Both the Compact and member districts have invested in supports for high school students to help them build the academic and social-emotional skills needed to succeed in their college and career pursuits. CSCC's Sherry Minton works with K-12 districts that are developing grades 9 through 14 pathways. Minton

Improved Outcomes for Underrepresented Students

Between 2012 and 2015, Columbus State Community College reported a:

decrease in the degree/
credential completion gap
between African American
and white students

decrease in the degree/
credential completion gap
between students from
low-income backgrounds
and those from middleincome backgrounds

increase in credentials awarded to African
American students

Source: The Central Ohio Compact 2017: A regional strategy for college completion and career success; http://centralohiocompact.org/wp-content/uploads/2017-Compact-report.pdf

illustrated one strategy to support students who don't yet qualify for College Credit Plus courses: "They can build that readiness to take a College Credit Plus course by pursuing an industry-recognized credential while still in high school." That path carries the double benefit of helping students build foundational skills while also earning a credential that has value in

the labor market and qualifies them for an entry-level position in a high-demand career field.

The Road Ahead

Accelerating Progress on Degree Attainment

Barriers to Overcome

What are the main challenges to the full rollout of the pathway work as an engine for reaching Central Ohio's North Star goal of 65 percent degree and credential attainment? First, the region predicts two countervailing trends. Enrollment in both K-12 and higher education systems is on the decline and expected

to continue to decline, at least in the near term. The region is simultaneously experiencing a rise in the number of employers that need an increasingly skilled workforce. As Warner framed the issue, "We're not going to

grow our way out of this supply-demand problem with more students coming through the pipeline; rather, we need to increase the success rates of students already enrolled in our K-16 institutions."

The region is also confronting other challenges to achieving its attainment goal, including the hidden costs of college. Some students find themselves unable to persist

in their studies due to lack of access to basic needs such as food, transportation, child care, and housing. This problem is part of a national trend as more students from low-income backgrounds are enrolling in two- and four-year institutions. Dackin noted, "We are really looking at these barriers that keep students from completing their education and then engaging in workforce."

The Central Ohio region also faces a shortage of teachers who are prepared to teach in highly specialized fields, including ones that are part of popular pathways such as information technology, health sciences, and engineering. Finally, several

regional leaders pointed out that schools and colleges must develop additional support strategies that strengthen students' social and emotional skills (e.g., resilience, self-advocacy, and academic tenacity). These challenges prevent

some students from powering through the inevitable challenges that all students encounter in their early college studies.

"We are really looking at these barriers that keep students from completing their education and then engaging in workforce."

Building New Capacities

The Compact's 65 percent attainment goal is the main driver behind the education and workforce development strategy in the Central Ohio region. And while educational attainment in the region

has ticked up in recent years, it is still 20 percentage points short of their goal. Fortunately, the region has cultivated several cornerstone capacities that provide a civic foundation for further attainment gains in the years ahead:

- The Compact has proved to be an effective vehicle for K-12, postsecondary, and industry collaboration, with strong CEO-level commitments from all three industry sectors key to the region
- 2. An expanding pool of regional employers is motivated to help increase the productivity of the education and workforce systems, and provide experiential and work-based learning opportunities to students

- 3. The region has deepened capacity to produce and use data from across systems for both diagnostic and continuous improvement purposes
- 4. The region has expanded its range of student support strategies, especially for underserved and first-generation college students, to help them overcome barriers to enrollment and completion of degrees and credentials
- The state policy environment is favorable to continued advances in dual credit course completion, pathways alignment, work-based learning, and student supports





What can be learned from these stories about building systems of high-quality college and career pathways in the four GLCCPP communities? First, a **focus on equity in access and attainment** can improve the quality of education and career preparation for all students, not just a select few. Second, **finding common ground** across stakeholder groups from K-12, higher education, and industry can create stronger and more seamless connections between education and workforce systems that will ultimately benefit not just students, but also employers and regional economies. Third, early efforts can be strengthened and accelerated **through intentional and sustained commitment** to building a broad-based leadership coalition that is capable of driving a bold vision for pathways.

While no one community has fully tackled all of the challenges associated with designing a college and career pathways system at scale for their region, there are many bright spots in their collective work. Theirs are stories of works in progress that surface a number of concrete strategies and replicable approaches in line with the GLCCPP priority areas of leadership and governance, secondary-postsecondary alignment, and work-based learning delivery systems. Stakeholders and policymakers in other regions can learn from GLCCPP's work as they collaborate in their own contexts to design pathways that improve outcomes and expand opportunities for young people.

Lessons for Civic and Regional Leaders

Establishing the conditions for equity in and access to improved educational and employment outcomes for all youth through college and career pathways requires strong cross-sector partnerships with clearly defined leadership roles and responsibilities. Across GLCCPP communities, executive- and operational-level leaders from a variety of institutions and organizations accept responsibility for establishing, communicating, and executing on the vision for pathways.

This work has sometimes been led, at least initially, by one institution or stakeholder group leveraging its reach and resources to advance a regional pathways effort. However, the long-term sustainability and scaling of any community's pathways work will depend on the strength and development of distributed leadership, common ground, and early wins for all involved.

This kind of leadership is emerging across the four GLCCPP communities. And all have made progress, in their unique contexts and through their own strategies, to establish or strengthen clear intermediary functions to hold and advance a vision for pathways work. NECSS in Chicago's Northwest Suburbs, CSCC in Central Ohio, Madison's anchor team, and Alignment Rockford highlight the power of cross-organizational vision setting and collaboration as an essential component in a regional effort to build, scale, and sustain a pathways system.

A Community of Practice Builds Collective Impact

It is important to note that much of this progress was facilitated through the GLCCPP community of practice. Multiple times a year, stakeholders from the four communities convene to discuss their learning and experiences. Pathway leaders from different sectors share effective strategies, elevate problems of practice, and collaborate to refine approaches that will advance their work of designing and implementing high-quality college and career pathway systems. Coupled with ongoing guidance and targeted technical assistance from the GLCCPP coordinating team, the pathway work in these communities has accelerated and deepened in ways that would not have been possible if they each worked alone.

Lessons for Secondary and Postsecondary System Leaders

Each of the GLCCPP communities are striving to establish strong, collaborative partnerships to design programs of study that span secondary and postsecondary education and are aligned to regional career opportunities. Over time, these partnerships can pay dividends in the form of an increase in the number of students, especially those from traditionally underserved backgrounds, who take early college courses that are aligned to labor market needs. Students who take early college coursework develop their college-going identities and are more likely to enter, complete, and earn a postsecondary degree or credential.

Research on early college programs suggests that students who earn at least 12 college credits while in high school in both "gatekeeper" academic courses (i.e., nonremedial English and math) and technical courses are better served than those whose early college courses are essentially random (i.e., not taken with specific postsecondary credential requirements in a particular career field in mind).

To address this challenge, the GLCCPP communities are making strides to ensure that students receive individualized support and guidance to make informed decisions about a sequence of courses that are aligned to stackable, postsecondary credentials that have value in their regional labor market. It is also critical for each community to focus on the quality of early college credit course offerings, how to best prepare students for college-level work in high school, and how to best prepare and credential teachers to be qualified to teach early college courses.¹⁷ These pieces will be key to the long-term success of this aspect of the four GLCCPP communities' pathways initiatives.

Lessons for Education and Industry Partnerships

High-quality college and career pathways need educational and industry stakeholders to collaborate to inform pathways design and develop scalable systems for work-based learning. Although the relationships and mechanisms that enable employers to collaborate with educators on the design, structure, and management of career-focused workplace learning are not always in place, each of the GLCCPP communities has made progress. Their increased capacity and commitment is building regional infrastructure to sustain high-quality work-based learning experiences that can support students' successful transition into the labor market. Ultimately, the promise of work-based learning is that young people will gain access to the unknown "black box" of the world of working adults and, for many, to social capital that is crucial to launching a career in occupations that offer strong career ladders.

However, to do this well requires abandoning a traditional and deeply ingrained model of teaching and learning that is founded on the belief that we must first learn about something before we can learn to be something. Work-based learning, done well, inverts this model because it welcomes young people into the social activity of the professional world. There, by learning to think like a practitioner and use the tools of a discipline, students begin to learn about that discipline. The real challenge to realizing a vision for truly integrated and effective work-based learning in a pathways system is to help others realize that, for example, we don't learn how to be engineers by studying engineering—we learn how to be engineers by doing things that engineers do.

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Lessons for State-Level Leaders and Policymakers

State leaders can look to the efforts and learning of GLCCPP communities for insights about how to accelerate the creation of college and career pathways at greater scale through policy change. Good policies help educational institutions, workforce development agencies, intermediaries, and employers to work together to support pathway development. These policy shifts can serve as a roadmap for state leaders to transform their states' economies and talent pipelines.¹⁹

Align State Systems.

Building college and career pathways requires an all-hands-on-deck approach. Education systems, workforce development systems, and employers must work together to support students' transitions from high school to college and into family-supporting careers. State policymakers can help facilitate the alignment of systems by:

- Setting a clear and ambitious state goal for postsecondary attainment
- Establishing a cross-agency partnership to lead the work
- Building strong data systems that follow student success across secondary and postsecondary education and into the workforce

Bridge High School, College, and Career.

College and career pathways bridge high school, college, and career to set individuals up for success in the workplace. Robust pathways don't prescribe one path but provide multiple entry and exit points into education and jobs. State policymakers can support and strengthen these bridges by:

 Making regional labor market data available to high schools, colleges, and employers so that pathways are focused on high-demand jobs and industry-valued certifications

- Offering every high school student the opportunity to earn college credit and industry credentials at low or no cost
- Providing incentives for high school teachers to obtain credentials to teach dual enrollment courses
- Implementing statewide credit transfer policies so credits earned in high school or college follow students as they move through the education system

Connect Learning to Work.

College and career pathways integrate a continuum of workbased learning opportunities that expose students to the world of work and provide young people with the academic, technical, and employability skills they need for college and career success. State policymakers can support this connection by:

- Bringing education leaders and business leaders together to design statewide frameworks for high-quality work-based learning experiences
- Supporting schools by allowing credit for work-based learning experiences and flexibility in seat-time requirements
- Supporting employers by clarifying their responsibilities and removing unnecessary barriers to work-based learning



Despite our best intentions, our nation continues to struggle with a deep misalignment between what the workforce needs and how young people are prepared for careers. The changing nature of work presents new challenges to this already complex effort. Far too many young people continue to fall out of our education and career preparation systems without achieving a postsecondary credential or degree that gives them options and power in the labor market—a reality that severely limits their ability to succeed in today's rapidly changing economy. This challenge cannot be tackled by any one stakeholder group; it is not a demand-side or a supply-side problem to solve alone. Only through co-design and co-creation by key representatives from the K-12, postsecondary, and workforce sectors can we design strong and integrated systems that can counteract the current deepening and widening of socioeconomic inequities.

The stories presented above shed light on how four communities across three Great Lakes states are working within and across their communities to better support their young people. Their progress provides insight about how other communities in the Great Lakes region and beyond can move the needle, systematically, to ensure that all young people are prepared to not only meet the current and emerging needs of the workplace, but to also find value and meaning in their working lives and fully realize their best possible futures.

The GLCCPP work also suggests that, going forward, pathways efforts will need to double-down on two things. First, stakeholders interested in college and career pathways should focus on designing *durable systems* rather than implementing programs that may come and go or that meet only a short-term need. Pathways cannot be fully realized if they are merely an add-on initiative or a high school reform strategy. Second, in both educational and workplace contexts it is crucial that the student experience and trajectory through the pathways system is *guided by expectations* rather than just providing opportunities that only some students may take advantage of.

Systematically integrating secondary, postsecondary, and workforce systems at scale is challenging and ambitious work. Yet, it is work worth doing to give our youth—and our communities—stronger and brighter futures.

When communities make a deep commitment and collaborative effort to engage in the hard task of designing, implementing, and scaling high-quality college and career pathways systems—like those emerging in each of the GLCCPP communities—they increase equity by opening up clear paths to college, careers, and economic advancement for all young people.

That's what happened with Shayla through her pathways experience at Project Excel. The promise and power of career-aligned education—and the mission driving the Great Lakes College and Career Pathways Partnership—is to inspire our young people to dream for a brighter future, and then prepare them to realize those dreams.

ACKNOWLEDGMENTS

The authors would like to acknowledge members of the Great Lakes College and Career Pathways Partnership coordinating team who provided early guidance on the focus and overall framing of the pathways stories in each of the GLCCPP communities: Amy Loyd and Leah Moschella of JFF, Julie Koenke of ConnectED, and Jonathan Furr, Andrea Messing-Mathie, and Emily Rusca of the Education Systems Center at Northern Illinois University.

Special thanks to Michael Deuser, formerly of JFF and now chief of college and career success at the Chicago Public Schools, who provided an initial draft of the case background section and advised on the overall framing of the report.

For a fuller version of this case study, see Career Pathways in Action: Case Studies from the Field, edited by Robert Schwartz and Amy Loyd, Harvard Education Press, October 2019.

ABOUT JFF

JFF is a national nonprofit that drives transformation in the American workforce and education systems. For 35 years, JFF has led the way in designing innovative and scalable solutions that create access to economic advancement for all. Join us as we build a future that works. www.iff.org

ABOUT PATHWAYS TO PROSPERITY

Launched in 2012, Pathways to Prosperity is a joint initiative of JFF and the Harvard Graduate School of Education that seeks to ensure that many more young people complete high school, attain postsecondary credentials with currency in the labor market, and launch careers while leaving open the prospect of further education. www.jff.org/pathwaystoprosperity

ABOUT THE JOYCE FOUNDATION

The Joyce Foundation works with grantee partners to research, develop, and advance policy solutions to improve quality of life, promote community vitality, and achieve a fair society. Based in Chicago, we focus grantmaking in the Great Lakes region and also seek national impact. We believe a community is healthiest when benefits are shared widely among its people, and that there are certain essentials our public systems must get right in areas such as quality education for all and employment opportunities for disadvantaged workers. www.joycefdn.org

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