



**QUALITY INDICATORS
FOR PATHWAYS DESIGN
AND IMPLEMENTATION**

GREAT LAKES COLLEGE AND CAREER PATHWAYS PARTNERSHIP

Funded by the Joyce Foundation, the **Great Lakes College and Career Pathways Partnership (GLCCPP)** supports four Great Lakes communities in building high-quality college and career pathways that equip students—particularly historically marginalized students or underrepresented groups—to thrive in college, career, and beyond. The Joyce Foundation created this funding opportunity in 2015 as one strategy to identify, document, and scale programmatic and policy innovations to improve the educational and employment outcomes of residents in the Great Lakes region.

A competitive grant process selected the following regions for investment based on their dedicated leadership, strong K-12 and postsecondary partnerships, vision for enhancing college and career pathways systems, student population needs, and high employer involvement:

- › The Central Ohio/Greater Columbus area
- › Madison, WI
- › Northwest Chicago suburbs, IL
- › Rockford, IL

The Joyce Foundation also awarded grants to three national leaders in college and career pathway development to provide strategic technical assistance to these Great Lakes regions as they build and expand their pathways systems: ConnectEd - The California Center for College and Career, JFF's Pathways to Prosperity team, and Education Systems Center at Northern Illinois University.

Through GLCCPP, these four regions are bridging stakeholders across secondary, postsecondary, and workforce systems in order to align secondary and postsecondary education with career opportunities in high-demand industries. In each region, pathways are collaboratively structured to include a variety of college and career preparation strategies, including work-based learning and early college credit, to enable students to pursue a two- or four-year degree and obtain a credential valuable in the labor market.

GLCCPP Quality Indicators

To support this initiative, the Coordinating Team (ConnectEd, EdSystems, and JFF) developed a set of Quality Indicators (June 2016) to inform the evaluation and continuous improvement of pathways design and implementation in each GLCCPP region. Informed by the work in the first phase of the grant (2015-2017), the Coordinating Team revised and updated these Quality Indicators to reflect three priority areas identified as critical for guiding pathway development and implementation: **leadership and governance, secondary through postsecondary alignment, and a work-based learning delivery system.** The Coordinating Team also identified four indicators common across priority areas that are essential considerations for successful implementation: **data and metrics, equity and access, communications and messaging, and learning and teaching.**

The guiding principles and practices outlined in these Quality Indicators are based on best practice, research, and implementation in the field to support and drive the development of college and career pathways that enable all students to have access to educational and economic opportunity and prepare them for success in college, career, and life.



GREAT LAKES COLLEGE AND CAREER PATHWAYS PARTNERSHIP



Leadership and Governance

- A. Leadership Structures
- B. Core Values and Beliefs
- C. Regional Alignment and Development
- D. Data and Metrics
- E. Equity and Access
- F. Communications and Messaging
- G. Learning and Teaching



Secondary-Postsecondary Alignment

- A. Workforce Alignment
- B. Secondary Pathway Structure
- C. Postsecondary Articulation
- D. Personalized Supports
- E. Data and Metrics
- F. Equity and Access
- G. Communications and Messaging
- H. Learning and Teaching



Work-Based Learning Delivery System

- A. Work-Based Learning Continuum
- B. Integration
- C. Regional Capacity and Infrastructure
- D. Policy/Procedure
- E. Data and Metrics
- F. Equity and Access
- G. Communications and Messaging
- H. Learning and Teaching

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Leadership and Governance

Clearly articulated leadership and governance structures are vital to ensure alignment and quality delivery of college and career pathways and work-based learning experiences for students across their secondary and postsecondary education. Convening leadership is an essential component of this system and is comprised of both executive-level leaders and strategic representatives from across a region or community to establish and operationalize the vision for pathways implementation.

A

LEADERSHIP STRUCTURES

1. An Executive Leadership Committee, with designated roles and responsibilities as well as clearly defined membership, is established
2. Executive Leadership monitors and supports the work of an Operational Leadership Committee by addressing institutional barriers, gaps in policy, and program challenges based on recommendations and findings of the Operational leadership
3. The Operational Leadership Committee (that may include additional organizations not part of the Executive leadership) implements a comprehensive regional pathways system and is responsible for enacting and informing the vision of the Executive Leadership through functional work groups with clear work plans
4. The Operational Leadership Committee meets regularly with the Executive Leadership to communicate challenges and successes and identify areas for cross-systems collaboration in order to solve problems, remove barriers, and more effectively align systems
5. Leadership Committees convene key players as needed to clarify organizational functions, define relationships and interdependencies, promote deeper collaboration, and decide on metrics to hold partners mutually accountable for results
6. With input from key partners and stakeholders, Leadership Committees create comprehensive work plans to address near-, mid-, and long-term high priority needs that promote results

B

CORE VALUES AND BELIEFS

Leadership Committee members:

1. Are committed to leading efforts among their constituents to broaden sector-wide commitments and investments to support pathway success and expansion
2. Assume responsibility for asserting their influence by connecting and encouraging their employees, constituents, and colleagues to play active partner roles in implementing and expanding pathways
3. Confirm, collect, and hold themselves accountable to indicators of success and impact of pathways implementation (i.e., traditional education measures,

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assessment of student and parent satisfaction, and indicators of social and emotional well-being)

4. Buy into pathways as a strategic approach to address regional social and economic well-being through improved opportunities and outcomes for youth

C REGIONAL ALIGNMENT AND DEVELOPMENT

1. Ongoing pathways development considers multiple factors (e.g., regional labor market projections, student interest, willing business and industry partners, qualifications of existing teachers, and availability of postsecondary programs of study) to ensure alignment to regional and community-based needs
2. High-functioning, industry-led advisory councils in each pathways sector convene regularly to guide the growth of pathway and ensure alignment
3. Cross-sector stakeholders define and agree to a vision and outcomes for educational and economic opportunity for youth in the region as a result of engagement in college and career pathways

The following set of common cross-priority area indicators reflect critical considerations that support successful pathways design and implementation:

D DATA AND METRICS

1. Cross-organizational data-sharing agreements are created in order to develop a data dashboard that represents a broad set of success indicators critical to the success of pathways implementation
2. Convening leadership establishes performance- and process-based metrics by which to measure their effectiveness for multiple time horizons (e.g., one year, five years, 10 years)
3. Data collection and reporting processes and associated communication strategies are established to regularly and publicly share progress on the performance metrics in the short- and medium-term as it pertains to pathways implementation and in the longer-term to community and economic well-being

E EQUITY AND ACCESS

1. The principles of equity and access serve as a through line in pathways development, implementation, and associated planning to address gaps and barriers that will improve student success, particularly for historically marginalized students
2. Outreach and support strategies, particularly for historically marginalized students or underrepresented groups, are informed by disaggregated participation and outcomes data
3. Convening leadership engages community-based organizations who have

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not historically been involved in pathways planning to determine community and student needs for particular wraparound supports, as well as to identify potential barriers to participation or success

F

COMMUNICATIONS AND MESSAGING

1. Pathways leadership deploys ongoing messaging to ensure sustained stakeholder support for pathways as a primary strategy for improving student outcomes
2. Convening leadership establishes clear communications protocols to ensure consistency of messaging to the broader region/community
3. Convening leadership supports secondary, postsecondary, employer, and workforce partners in development of communications and messaging (as outlined in prior sections)

G

LEARNING AND TEACHING

1. A guiding framework and/or definition of the characteristics of high-quality learning and teaching is established for secondary through postsecondary pathways design and implementation
2. Pathways leadership initiates and ensures collaboration and coordination related to strategies for learning and teaching across secondary and postsecondary institutions



Secondary-Postsecondary Alignment

Pathways engage students in rigorous academics integrated with real-world technical skills, work-based learning, and personalized supports that span secondary education and extend and align through a postsecondary credential with value in the labor market. Pathways are designed to appeal to and engage ALL students in order to prepare them for success in the full range of postsecondary options and support their transition to a rewarding career with growth opportunities, while also meeting employer needs for talented young professionals in regional economies.

A WORKFORCE ALIGNMENT

1. Pathways align to the regional/state labor market and lead to high-demand, high-growth careers with living wages
2. Pathways-aligned employers from the region work with secondary and postsecondary staff and faculty to design, deliver, and enhance curricular offerings and work-based learning experiences
3. Industry partners support sector-specific pathway and program of study design

B SECONDARY PATHWAY STRUCTURE

1. The pathway has a coherent three- to four-year program of study aligned to academic and industry-specific technical standards as well as postsecondary requirements and credentials
2. Academic and technical course faculty within and across grade levels have systematic opportunities for collaboration (i.e., common preparation period, professional development, etc.) to align and integrate curriculum as well as plan for and coordinate personalized student supports
3. All pathway students, regardless of prior academic achievement, have the opportunity to meet a full range of postsecondary eligibility requirements
4. To the extent possible, pathway students participate as a cohort in the program of study's academic and technical courses
5. Developmentally appropriate work-based learning experiences are integrated into and/or aligned with the program of study's curriculum throughout the pathway

C POSTSECONDARY ARTICULATION

1. Clear policies enable all students to earn postsecondary credits in high-quality technical and gateway academic courses, with parity of policies for dual credit, advanced placement, and international baccalaureate work
2. Pathways programs of study are aligned from secondary to and through postsecondary with embedded opportunities to earn stackable, portable, industry-recognized credentials throughout the pathway and culminating in postsecondary credentials with value in the regional labor market



3. The secondary to postsecondary education transition is seamlessly connected through curriculum alignment and cross-institutional faculty and administration collaboration
4. Contextualized developmental education and/or acceleration strategies in literacy and mathematics are embedded in pathways programs of study to provide support and on-ramps for students who need it
5. Clear and efficient maps and transfer agreements articulate how pathways extend from secondary into two-year to four-year credentials and a consistent message and brand

D PERSONALIZED SUPPORTS

All pathway students:

1. Receive systematic and high-quality college and career counseling and advising
2. Develop individualized college and career plans, with evidence of their understanding of various college and career options
3. Receive individualized supports based on their needs and goals

The following set of common cross-priority area indicators reflect critical considerations that support successful pathways design and implementation:

E DATA AND METRICS

1. In partnership with employers and postsecondary partners, current and projected labor market data are used to inform pathway program of study offerings
2. Clearly defined and established metrics and benchmarks inform a system for regularly tracking, reporting, and utilizing data to inform pathway program improvement and student outcomes at both secondary and postsecondary levels
3. Disaggregated participation data are gathered and analyzed to inform strategic planning for equity and access (see below)

F EQUITY AND ACCESS

1. Plans are developed and implemented to identify and address gaps and barriers to improve student success in pathway programs of study, particularly for historically marginalized students
2. Pathways serve a diverse body of students that reflect local demographics
3. Pathways programs of study have a level of rigor and opportunity equal to or greater than that of non-pathways programs of study



4. Emergent or continuing barriers to pathways participation and success, particularly for historically marginalized students or underrepresented groups, are identified through analysis of disaggregated participation and outcomes data
5. Outreach and support strategies, particularly for historically marginalized students or underrepresented groups, are informed by disaggregated participation and outcomes data
6. Data are used to provide strategic and systematic support and marshal additional resources to ensure equitable access to high-quality, pathway-aligned coursework for all students

G COMMUNICATIONS AND MESSAGING

1. A pathways outreach/marketing plan with clear and consistent messaging/branding is in place to communicate with relevant constituents and stakeholders (e.g., community members, students and families, educators, employers; etc.) about the value and benefits of participation in pathways
2. Key pathways stakeholders (e.g., high school/school district and postsecondary staff and instructors, industry and employer representatives, etc.) communicate a clear and consistent message about the strategy and value of college and career pathways programming
3. Participation and outcomes data is leveraged to inform communication strategies for the public

H LEARNING AND TEACHING

1. Learning experiences are co-designed by education and industry partners across the secondary-postsecondary continuum
2. Learning goals are aligned with pathway learning outcomes
3. Academic, technical content, and critical employability skills (e.g., leadership, teamwork, communication, problem solving, work ethic, initiative, adaptability, etc.) are integrated in and out of the classroom as part of the pathways experience
4. Authentic assessments evaluate the quality of student learning and experience, work products and performances, and the application of knowledge and skills toward pathway learning outcomes
5. Results of formative and summative assessments inform and improve curricular and instructional design and delivery
6. Pathways learning experiences engage students in authentic, industry-aligned projects supported by instructional strategies that are student-centered, developmentally appropriate, and research-based
7. Teaching faculty have access to and experience with pathway industry professionals (e.g., externships, individual and team-based field study visits)

3



Work-Based Learning Delivery System

All students participate in a personalized and coordinated continuum of work-based learning experiences designed to help them master and demonstrate pathways-aligned academic, technical, and employability skills to enhance their success meeting the demands of college and career. Work-based learning experiences along the continuum are increasingly personalized and aligned with specific industries and occupations.

A WORK-BASED LEARNING CONTINUUM

The continuum:

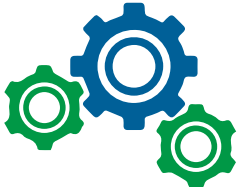
1. Is co-designed and adopted by secondary and postsecondary educators and industry/employer representatives
2. Articulates expectations beginning in at least 9th grade and continuing through postsecondary (ideally culminating in a paid or for-credit experience)
3. Outlines a range of high-quality work-based learning experiences, aligned with the needs identified by industry and local/regional labor market information

B INTEGRATION

1. Work-based learning experiences are aligned and sequenced with academic and technical coursework in the program of study throughout the pathway
2. Work-based learning experiences support student progress toward attaining pathway learning outcomes
3. Employers and educators collaborate on the creation, design, and delivery of high-quality experiences along the work-based learning continuum
4. Work-based learning experiences are assessed to determine students' attainment of academic, technical, and employability skills aligned to pathway student learning outcomes

C REGIONAL CAPACITY AND INFRASTRUCTURE

1. One or more organizations within the region's pathways ecosystem manage the work-based learning delivery system, including recruiting and convening key stakeholders to champion and support the integration of work-based learning into the pathways system
2. Formalized processes and protocols are used to recruit and engage employers based on pathways needs and aligned to regional labor/workforce data analysis
3. Formalized processes and tools support the management of relationships between educators and employers
4. A well-established database fosters relationships between educators and employers, monitors supply and demand of opportunities, and facilitates high-quality student placements



5. Stakeholders use a formally adopted work-based learning “toolkit” to support experiences across the work-based learning continuum (i.e., selection/matching protocols, job descriptions, supervisor training, etc.) that includes curated tools and resources relevant/appropriate for the regional context (i.e., not just a random collection of “found” items)

D**POLICY/PROCEDURE**

1. Local/regional labor market data are used to develop policies and procedures for work-based learning offerings and experiences
2. Pathways leadership (e.g., convening leadership, work-based learning intermediary) develops and/or advocates for policies that ensure equitable access, industry alignment, and funding for work-based learning

The following set of common cross-priority area indicators reflect critical considerations that support successful pathways design and implementation:

E**DATA AND METRICS**

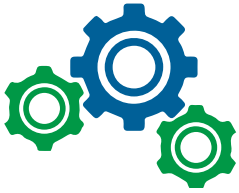
1. Clearly defined and established metrics and benchmarks inform a system for regularly tracking, reporting, and utilizing data to inform pathway program improvement and student outcomes at both secondary and postsecondary levels
2. Criteria are established to measure the effectiveness of work-based learning integration in pathways, including identification of needed improvements to the program design and implementation

F**EQUITY AND ACCESS**

1. Plans are developed and implemented to address gaps and barriers that will improve student success, particularly for historically marginalized students
2. Data are used to provide strategic and systematic support, inform outreach, and marshal additional resources to ensure equitable access to high-quality experiences for all students

G**COMMUNICATIONS AND MESSAGING**

1. A work-based learning outreach/marketing plan with clear and consistent messaging/branding is in place to address and communicate with relevant constituents and stakeholders (e.g., community members, students and families, educators, employers, etc.)
2. Key pathways stakeholders (e.g., high school/school district and postsecondary staff and instructors, industry and employer representatives, etc.) communicate a clear and consistent message about the strategy and value of integrated work-based learning in a pathways ecosystem



3. Pathways leadership has a clearly articulated and public statement about the value and benefit of work-based learning that speaks to the needs and interests of all stakeholders
4. Participation and outcomes data is leveraged to inform communication strategies for the public

H**LEARNING AND TEACHING**

1. Education and industry partners collaborate on the design of work-based learning experiences, reflective processes, etc.
2. Work-based learning experiences are aligned to and advance pathway learning outcomes
3. Work-based learning experiences are sequenced and designed to provide opportunities for students to learn about work and learn through work as well as develop and demonstrate critical employability skills (e.g., leadership, teamwork, communication, problem solving, work ethic, initiative, adaptability, etc.)
4. Authentic assessments evaluate the quality of student learning and experience, work products and performances, and the application of knowledge and skills toward pathway learning outcomes
5. Results of formative and summative assessments inform and improve work-based learning experience design and delivery

GLOSSARY

ARTICULATION

Articulation is a process through which educational institutions align curricula and courses in order to eliminate the need for students to repeat coursework as they transition from one educational institution to another. Articulation may be used to support dual credit or credit transfer.

COLLEGE AND CAREER COUNSELING

Integrated college and career counseling supports students' informed educational and career choices. Beginning no later than ninth grade—and ideally in the middle grades—students learn about postsecondary and career options through developmentally appropriate activities that support their decision making about high school course-taking and postsecondary opportunities aligned with the knowledge and skills needed to succeed in the workplace.

COLLEGE AND CAREER PATHWAYS

College and career pathways intentionally align, connect, and integrate academic and technical learning and skill development, and work-based learning experiences within an industry sector. Pathways span secondary and postsecondary education and workforce development systems.

The goal is to prepare students with the knowledge and skills needed to attain credentials with value in the labor market and to launch meaningful careers. College and career pathways systems include multiple entry and exit points that support students to build additional skills and knowledge, attain additional degrees and credentials, and advance in sector-specific employment.

CONVENING LEADERSHIP

Convening leadership is an essential component of college and career pathways governance and includes both executive-level leaders and strategic representatives from across a region or community. The convening leadership establishes and champions the vision for pathways and operationalizes this vision through the coherent design and implementation of pathways that span secondary education, postsecondary education and training, and workforce.

See also: Executive Leadership; Operational Leadership.

EXECUTIVE LEADERSHIP

Executive leadership comprises executive- and/or senior-level leaders from across regional institutions, including workforce and economic development, chambers of commerce, industry and employer representatives, two- and four-year postsecondary institutions, schools and/or school districts, local government leaders from departments focused on either workforce or youth issues, and, when appropriate, nonprofit organizations focused on youth, workforce, and/or economic development.

FORMATIVE ASSESSMENT

The goal of formative assessment is to monitor student learning and to provide ongoing feedback that can be used by instructors to improve their teaching, by workplace supervisors to improve their mentoring, and by students to improve their learning.

To learn more about formative assessments, visit www.cmu.edu/teaching/assessment/basics/glossary.html.

OPERATIONAL LEADERSHIP

Operational leadership comprises strategic representatives with decision-making authority (who may or may not be part of the executive leadership group) from regional institutions, including workforce and economic development, chambers of commerce, industry and employer representatives, two- and four-year postsecondary institutions, schools and/or school districts, and local government leaders from departments focused on either workforce or youth issues, and, when appropriate, nonprofit organizations focused on youth, workforce, and/or economic development.

This cross-stakeholder group convenes regularly and collaborates, often through forming and managing subgroups to operationalize the work of regional pathways design and implementation, to execute the vision and direction provided by the executive leadership.

PATHWAYS

See College and Career Pathways.

PERSONALIZED SUPPORTS

Personalized supports are intentional strategies, programs, and/or interventions that assist students in attaining their learning and performance goals and outcomes. Examples of such supports include tutoring, academic intervention classes, special education services, supplemental and/or accelerated instruction, counseling, advisory programs, credit recovery, Advancement Via Individual Determination (AVID), health services, transportation, child care, etc.

PROGRAM OF STUDY

A program of study 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 cluster. 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 sub-baccalaureate and baccalaureate degrees and credentials in an industry sector.

SUMMATIVE ASSESSMENT

The goal of summative assessment is to evaluate and report on student learning and performance at the end of an instructional unit, learning experience, and/or work-based learning experience. Evaluations of learning and performance are assessed in relation to an established standard, proficiency indicator, or benchmark.

To learn more about summative assessments, visit www.cmu.edu/teaching/assessment/basics/glossary.html.

TECHNICAL CONTENT

Technical content refers to industry-specific knowledge and skills learned in school- or work-based settings.

WORK-BASED LEARNING

Work-based learning is an intentional sequence of iterative and increasingly complex experiences that connects learning in the workplace to learning in the classroom to support students' exposure to, entry into, and advancement in careers. Through work-based learning, students gain and practice professional and technical skills, knowledge, and readiness for work through meaningful job tasks in the workplace (or an environment that simulates the workplace).

Work-based learning models encompass a continuum of learning experiences that span career exploration and exposure activities such as career fairs and job shadowing, career preparation activities such as internships through which students gain employability and technical skills, and career experiences such as apprenticeships and on-the-job training.

WORK-BASED LEARNING INTERMEDIARY

A regional work-based learning intermediary recruits and convenes key stakeholders from across sectors to integrate work-based learning throughout the pathways system and to develop, broker, and aggregate work-based learning experiences. The work-based learning intermediary, which may be a sub-group created by the operational leadership or a separate entity altogether (an existing organization or one created anew), works in concert with the convening leadership groups.

The definitions of terms presented in this glossary are adopted for use in the Great Lakes College and Career Pathways Partnership; other definitions may be used in the field and/or by GLCCPP partners in other contexts.



ABOUT CONNECTED

ConnectED: The National Center for College and Career partners with school, district, and community leaders to inspire and equip all students to succeed in college, career, and civic life. ConnectED seeks to challenge the status quo in order to transform education through Linked Learning pathways. Since 2016, ConnectED has seen incredible shifts happen in classrooms, districts, and communities across the country. Linked Learning is an approach that every child deserves, and ConnectED is working hard to bring high-quality, relevant, and rigorous education to more school districts across the country.

For more information, please visit www.connectednational.org.



ABOUT EDUCATION SYSTEMS CENTER

Education Systems Center at Northern Illinois University plays a central role in developing policies and programs to support career pathways across Illinois. EdSystems has strong experience in understanding the state policy aspects of local pathway system-building, structuring and implementing sector-based and regional partnerships, and defining roles for four-year postsecondary institutions to strengthen secondary to postsecondary pathway design and implementation.

For more information, please visit www.edsystemsniu.org.



ABOUT JFF & PATHWAYS TO PROSPERITY

JFF is a national nonprofit that builds educational and economic opportunity for underserved populations in the United States.

The Pathways to Prosperity initiative—a collaboration of states and regions, JFF, and the Harvard Graduate School of Education—seeks to ensure that many more young people complete high school and attain postsecondary credentials with value in the labor market. Each state and regional member is engaging educators and employers in building a system of grades 9-14+ career pathways, combining high school and community college, that launches young people into initial careers while leaving open the prospect of further education.

For more information, please visit www.jff.org and www.PtoPNetwork.org.

TheJoyceFoundation

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 grant making 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.

For more information, please visit www.joycefdn.org or follow us at @JoyceFdn.