



Guiding Principles for Programs of Study and Career Pathways

Illinois Guiding Principles and Design Elements

Shortly after the reauthorization of Perkins IV, the Illinois Community College Board sponsored an initiative conducted by the Office of Community College Research and Leadership (OCCRL) to develop a set of guiding principles and design elements for the implementation of programs of study. Building on an extensive review of existing research and literature on program of study development, six principles, each with a list of design elements, were drafted. The principles and elements were reviewed and finalized by a diverse committee comprised of about 60 leaders and practitioners from secondary and postsecondary education systems. The principle statements that follow are outlined in depth in the Illinois Programs of Study Guide (2009). They include:

- 1. **Leadership, Organization and Support.** Programs of study are developed, supported and led with guidance from collaborative partners.
- 2. Access, Equity and Opportunity. Each and every student has access to educational opportunities and services that enable their success.
- 3. Alignment and Transition. Education and training providers, with input from business and industry, enhance alignment that facilitates student preparation and transition through the educational pipeline.
- 4. Enhanced Curriculum and Instruction. Curriculum and pedagogy involve rigorous and relevant instruction that enhances learning and enables students to attain academic and technical standards and credentials.
- 5. **Professional Preparation and Development.** Comprehensive and continuous professional development that impacts teaching and learning is delivered to enhance the recruitment, preparation and retention of qualified instructional and administrative staff.
- 6. **Program Improvement and Accountability.** Data are collected, shared, and utilized to improve outcomes and demonstrate accountability. (Taylor, Kirby, Bragg, Oertle, Jankowski, & Khan, 2009)

The principles have been used statewide as a framework to reshape programs of study to align with Perkins IV and its effort to develop a more comprehensive system of academic and career programs of study and pathways that lead to rewarding careers. The state is continuing to build and improve programs of study using the Pathways to Results process and has committed to advancing its efforts to create a career pathways approach. Toward that goal, Illinois has participated in related program development and improvement projects such as Shifting Gears, Accelerating Opportunity, and Complete College America, to name a few. To support the research needed to expand the original principles and design elements of programs of study and reflect the diverse stakeholders and participants within a comprehensive career pathway model, OCCRL recently conducted a review of some leading career pathway frameworks, specifically examining the stated principles of each and comparing them to the Illinois Guiding Principles and Design Elements. This brief summarizes the highlights gleaned in this crosswalk.

Developing the Crosswalk

A sample of career pathway initiatives was selected for this exploratory study based on information gained through active engagement with researchers, evaluators, and practitioners working on career pathways across the United States, and with input from state leadership. Initiatives were included that reflect a comprehensive approach to career pathways systems. As an exploratory study, the sample was limited to eight initiatives, and as such, it is not an exhaustive sample.

The eight initiatives listed in alphabetical order include:

- 1. Alliance for Quality Career Pathways
- 2. Breaking Though
- 3. Career Pathways Initiative: Six Key Elements (USDOL)
- 4. Complete College America: Guided Pathways to Success
- 5. Completion by Design
- 6. Illinois Career and Academic Preparation System and Accelerating Opportunity
- 7. Office of Career, Technical, and Adult Education (OCTAE)'s Rigorous Programs of Study
- 8. Pathways to Prosperity

The crosswalk was developed using publically available information on each initiative, including guidelines, toolkits, associated research, and presentations that provide guidance for implementation. This information was crosswalked with the Illinois Guiding Principles and Design Elements, to highlight areas of overlap and areas not included in the framework.

A table was created for each initiative. In the first column are the six Illinois Guiding Principles for the development and implementation of programs of study. In the rows are key points from each initiative that relate to the corresponding principle. Stated principles or elements of each initiative are indicated in bold text. For complete information, the reader must consult original documents (see references).

Table 1. Crosswalk between Alliance for Quality Career Pathways ^{1, 2} and Illinois Programs of Study Guiding Principles				
Principle 1: Leadership, Organization and Support	Commit to a shared vision/ strategy	Collaborate with public and private partners to make resources available	Engage employers and integrate Sector Strategy Principles	Implement supportive policies
Principle 2: Access, Equity and Opportunity	Aligned policies, funding and measures	Bridges from adult basic education, Temporary Assistance for Needy Families (TANF), military, workplace, and high school	Targeting individuals of varying needs and abilities	Focuses on systems change for clear transitions and support
Principle 3: Alignment and Transition	Support services and career navigation assistance to facilitate transistions ³	Multiple entry points. ⁴ Multiple exit points ⁴	State career pathways system- supportive policy, funding, and data infrastructure	Well-connected and transparent education, training, support services and credentials within specific sectors or cross-sector occupations. ⁴
Principle 4: Enhanced Curriculum and Instruction	Participant focused education and training ³	Consistent and non-duplicative assessments of participants' education, skills, and assets ³	Employment services and work experiences ³	Apprenticeships
Principle 5: Professional Preparation and Development	Not mentioned as a principle per se; however, technical assistance, professional development, and supporting materials are available to participating states and others			
Principle 6: Program Improvement and Accountability	Use data and shared measures to measure, demonstrate and improve outcomes	Implement and integrate evidence based practices and processes	Use of longitudinal cross-system data and labor market outcomes	Establish beta metrics for interim outcomes and more
Not included in the Illinois Guiding Principles or Elements	 As part of policy, pathway <i>participants</i>, <i>exiters</i> and <i>completers</i> are defined. Metrics are established for interim, training, and pathway outcomes including labor market attachment Adult education and developmental education are fully included as part of the designed pathway 			
Notes	 Bolded text are the "Six Criteria for Quality Career Pathways" The Alliance for Quality Career Pathways is a project of CLASP and is supported by the Joyce Foundation, the James Irvine Foundation, and the Greater Twin Cities United Way. Four "Essential Functions" of career pathways and programs Three "Essential Features" of career pathways Source: http://www.clasp.org/resources-and-publications/files/aqcp-framework-version-1-0/AQCP-Framework.pdf 			

Table 2. Crosswalk between Breaking Through ^{1, 2} and Illinois Programs of Study Guiding Principles				
Principle 1: Leadership, Organization and Support	Partnering with other organizations to scale up.	Establish a network		
Principle 2: Access, Equity and Opportunity	Comprehensive Support Services provided by "navigators" and "student success coaches"	Outreach to tribal colleges and English Language Learners in Texas	A focus on "low- skilled adult" population	Counseling to careers tool for college counselors, using labor market data to identify best bet options for students so employment outcomes are reached
Principle 3: Alignment and Transition	Aligning programs for low- skilled adults.	Through regional efforts, target industries offering advancement and employment	Chunk training into shorter sessions	More comprehensive assessment and intake process; four broad areas
Principle 4: Enhanced Curriculum and Instruction	Accelerated Learning by compressing courses	Include Labor market payoffs	Promote contextualized instruction and embedded credentials	Use differentiated instructional strategies and customize learning for diverse learners
Principle 5: Professional Preparation and Development	Support replication through promising practices and extensive learning network	Advisor training toolkit, contextualization toolkit, a practice guide, and more resources available on website	Peer learning meetings	Leadership and Learning Colleges helped develop lessons and build network
Principle 6: Program Improvement and Accountability	Programs are evaluated by third party evaluators	Expanding awareness through programs that have "clear and compelling evidence"	Catalogue initiatives to disseminate to Breaking Through network	Seek faculty feedback and engagement
Not included in the Illinois Guiding Principles or Elements	 Accelerated learning Strong state policy focus Comprehensive support service model Comprehensive assessment and intake model 			
Notes	 Bolded text are the "High-leverage Strategies" Breaking Through is led by Jobs for the Future and the National Council for Workforce Education. Funders include Charles Stewart Mott Foundation, North Carolina GlaxoSmithKline Foundation, the Ford Foundation, the Bill & Melinda Gates Foundation, and the Walmart Foundation. Currently some state efforts are supported by the U.S. Department of Labor and the Texas Higher Education Coordinating Board Source: http://www.jff.org/sites/default/files/publications/BT_Documentation_ June7.pdf 			

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Table 3. Crosswalk between Career Pathways Initiative: Six Key Elements (USDOL)¹ and Illinois Programs of Study Guiding Principles

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Principle 1: Leadership, Organization and Support	Build cross agency partnerships and clarify roles	ldentify sector or industry and engage employers	ldentify funding needs and sources	Establish shared mission, vision, goals, and plans
Principle 2: Access, Equity and Opportunity	Develop and provide college adjustment and retention services	Provide comprehensive wrap-around support services	ldentify target populations and their entry points	Offer flexible scheduling with alternative class times and locations
Principle 3: Alignment and Transition	Design education and training programs	Align policies and programs	Develop career ladders and lattices (career pathway roadmaps) making sequence clear	Ensure programs lead to industry recognized credentials
Principle 4: Enhanced Curriculum and Instruction	Design programs that meet skills of high demand industries Review or develop competency models to be reviewed and validated by employers			
Principle 5: Professional Preparation and Development	Not listed as a Key Element or addressed in the steps, but there are multiple resources on website and a comprehensive toolkit.			
Principle 6: Program Improvement and Accountability	Measure System Change and Performance	Define desired system and program outcomes	Establish how data will be collected, stored, tracked, and shared	Analyze data, revisit desired outcomes, and assess progress
Not included in the Illinois Guiding Principles or Elements	 Identify and leverage multiple funding sources to support pathways Focus on policy at state and local levels to promote comprehensive career pathway development Provide of comprehensive support services 			
Notes	1. Bolded text are the "Six Key Elements for Career Pathways" Source: https://learnwork.workforce3one.org/view/2001134052969836533/info			

	valk between Comple udy Guiding Principle	te College America: G s	iuided Pathways to S	Success ¹ and Illinois
Principle 1: Leadership, Organization and Support	Not addressed as a principle per se			
Principle 2: Access, Equity and Opportunity	Informed Choice Career information provided; match courses and degrees to students' abilities	Intrusive On-time Advising Students without major must attend a 'choosing a major' workshop	Enrollment in college-level courses is the default	Courses are available when students need them; no waiting
Principle 3: Alignment and Transition	Clear Progress to Guaranteed Courses Students receive real-time feedback	No Wasted Credits All courses count toward degrees	Default Pathways Students remain on chosen pathway unless given approval to change	15 to Finish All pathways are built for on-time graduation
Principle 4: Enhanced Curriculum and Instruction	Whole Programs of Study Students choose coherent programs, not random individual courses. Narrow to POS with guidance	Milestone Courses Required and recommended sequences; general education requirements must be rationalized	Workforce Connection Academic maps to high-demand jobs	Block Schedules Highly structured and predictable; required attendance
Principle 5: Professional Preparation and Development	Not addressed as a principle per se; however, reports, briefs and event materials available on website			
Principle 6: Program Improvement and Accountability	Draw on historical data to better inform student/ course decision- making (Degree Compass)	Performance funding	Disaggregating data by level and type of degree/ credential	End-to-End design Programs are built with the end goal in mind
Not included in the Illinois Guiding Principles or Elements	 Intrusive advising; students must see advisors when they do not meet scheduled progress Students need permission to take courses not on their schedule Milestone and gateway courses offered each semester; must be taken in recommended sequence College must guarantee courses available in sequence and terms designed in academic maps Math alignment to meta-majors Highly structured with required academic maps consisting of 4 essential components Cap degree credit hour limits of 120 for bachelors and 60 for associate degrees Statewide completion goals with campus-level action plans for meeting them 			
Notes	 Bolded text are "Essential Components" of the Guided Pathways to Success Framework Source: http://completecollege.org/docs/GPS%20BOOKLET%2006-14%20FINAL. pdf 			

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Table 5. Crosswalk between Completion by Design ¹ and Illinois Programs of Study Guiding Principles					
Principle 1: Leadership, Organization and Support	Commitment is sought from political leadership	Establish core team; determine roles, governance, and stakeholders	Assess stakeholders' engagement for change and investment in project	Strong focus on policy development	
Principle 2: Access, Equity and Opportunity	Ensure students know requirements to succeed, Including transparent sequences of courses	Integrate student supports with instruction	ldentify gaps/areas for improvement	Students are guided to make early declaration of academic major; choices can be revised	
Principle 3: Alignment and Transition	Accelerate entry into coherent program of study	Minimize time required to get college-ready	Reward behaviors that contribute to completion	Programs of study are structured and coherent, including clear start and end points	
Principle 4: Enhanced Curriculum and Instruction	Customize and contextualize instruction at the developmental and credit levels	Leverage technology to improve learning and program delivery	Faculty collaborate with support program providers to proactively deliver services to students	Integrate service learning, bridge programs, and learning communities	
Principle 5: Professional Preparation and Development	Completion by Des broad range of tec colleges in particip	hnical assistance to	Many detailed resources are available on Completion by Design and related websites (CCRC, Achieving the Dream and more)		
Principle 6: Program Improvement and Accountability	Continually monitor student progress and proactively provide feedback	Increase data system capacity and use	Interpret evidence among colleagues	Focus on unpacking completion data and setting benchmarks	
Not included in the Illinois Guiding Principles or Elements	 Acceleration through developmental levels Strong policy focus at all levels Statewide advisory board and learning community Strong retention-focused advising and intervention; coherent assessment and placement, consistently applied Intensive and proactive student support; some integrated in instruction 				
Notes	 Items in bold are called the "Eight Principles of Redesign" Source: http://ccrc.tc.columbia.edu/media/k2/attachments/principles-redesign- promising-approaches-cbd.pdf 				

Table 6. Crosswalk between Illinois Career and Academic Preparation System and Accelerating Opportunity, and Illinois Programs of Study Guiding Principles				
Principle 1: Leadership, Organization and Support	Promote culture shift to bring ABE students into core of community college mission and activities	Stakeholder engagement with external and internal partnerships: Workforce Investment Board, employers, business, academic and student support divisions at community colleges	Leadership and staff (state and college) commitment to deploy adequate resources to implement key actions and strategies	State identifies high impact policies and strategies to address them
Principle 2: Access, Equity and Opportunity	Comprehensive student supports – both academic and social			
Principle 3: Alignment and Transition	Intensive transition services	Create stackable certificates	Integrated pathways of basic skills education and career training	Scale and sustain by breaking down silos
Principle 4: Enhanced Curriculum and Instruction	Blend basic and technical skills	Utilize team teaching	Accelerate learning and student transition	Provide technology enabled, hybrid delivery
Principle 5: Professional Preparation and Development	Consistent and coherent professional development is offered to faculty and staff	State technical assistance is provided to colleges		
Principle 6: Program Improvement and Accountability	Student progress is monitored	ess is Use state and institutional level data to improve programs		
Not included in the Illinois Guiding Principles or Elements	 Required team teaching Workforce Investment Board involvement Comprehensive student support services 			
Notes	 Items in bold are Accelerating Opportunity's "Essential Activities." Sources: http://www.jff.org/initiatives/accelerating-opportunity/strategies#. U9BqYmOTFHB http://occrl.illinois.edu/articles/developing-and-leveraging-partnerships-and-collaboration-to-transition-adult-students-into-postsecondary-education-and-employment/ 			

Table 7. Crosswalk between the Office of Career, Technical, and Adult Education (OCTAE)'s Rigorous Programs of Study ¹ and Illinois Programs of Study Guiding Principles					
Principle 1: Leadership, Organization and Support	Policies and Procedures at the federal, state and local levels to promote program of study development Ongoing Partnerships among education, business, and other community stakeholders are central to POS				
Principle 2: Access, Equity and Opportunity	School Counseling and Academic Advisement help all students make informed decisions about which program of study to pursue				
Principle 3: Alignment and Transition	Course Sequences that are non-duplicative ensure that students transition from secondary to postsecondary	College and Career Readiness Standards define what all students are expected to know in college and careers and comprise the foundation of a program of study	Credit transfer agreements provide opportunity for secondary students to be awarded transcripted postsecondary credit		
Principle 4: Enhanced Curriculum and Instruction	Teaching and Learning Strategies include creative instructional approaches	Integrate academic and career education	Technical Skills Attainment include necessary knowledge and skills for entry into postsecondary education and careers		
Principle 5: Professional Preparation and Development	Professional Development should be sustained, intensive, and focused Professional Development opportunities should be provided to administrators, career and technical education and academic faculty to foster program of study design, implementation, and maintenance				
Principle 6: Program Improvement and Accountability	Accountability and Evaluation Systems gather quantitative and qualitative data.	National, state, and local assessments should be used to provide ongoing information on the extent students are attaining necessary knowledge and skills for entry into and advancement in postsecondary education and careers in chosen programs of study	Programs of study and student outcomes should be measured		
Notes	 Words in bold are the "Ten Components" identified by Office of Career, Technical, and Adult Education (formerly OVAE) 				
	Source: http://cte.dpi.wi.gov/files/cte/pdf/tencomponents.pdf				

Table 8. Crosswalk between Pathways to Prosperity ¹ and Illinois Programs of Study Guiding Principles				
Principle 1: Leadership, Organization and Support	Establish a cultural change of leaders about historical biases toward CTE; do so by promoting career focused pathways and providing evidence of education needed for 21 st century jobs	Expanded role of employers with engagement beginning in middle school to help set standards, design POS, advise students, & provide work-linked learning	Map local, umbrella infrastructure that support youth in career pathways; improve coordination among agencies	Reduce variation in the quality of community colleges and programs; scale programs with evidence of success
Principle 2: Access, Equity and Opportunity	Focus on forgotten 41% without any college (based on 2007 data)	Provide more aid for low-income students to address disparity	Make sure students are prepared for both college and careers	Ensure students are getting advice from well-trained career guidance counselors
Principle 3: Alignment and Transition	Include formal career guidance scheduled in school day	Develop individualized pathway plan beginning in middle school	Adopt "Common Core standards for more uniform academic currency" while still allowing differentiation in grades 11 and 12	Provide a transparent connection between students' programs of study and opportunities in the labor market
Principle 4: Enhanced Curriculum and Instruction	Utilize an integrated model of work and learning and in secondary school: job shadowing and internships- called "Work-Linked Learning."	Upgrade curriculum in CTE to match labor market needs (21 st Century CTE)	Promote multiple pathways approach, and improve literacy and math skills for all students	Pedagogy must address the diverse learning needs of individual students
Principle 5: Professional Preparation and Development	Not addressed directly; resource cited provides models of rigorous 21 st century CTE (p. 27).			
Principle 6: Program Improvement and Accountability	Improve productivity of degree granting, post-secondary institutions	Examine equity gaps in performance by gender, race, and economic status.	Consider implementing programs and policies that work in other countries (i.e. social compact with youth)	
Not included in the Illinois Guiding Principles or Elements	 Transparent connection between POS and tangible opportunities in the labor market in secondary and post-secondary coursework More comprehensive and robust career pathways system. Work-linked learning through job shadowing or internships in secondary school and beyond Larger role for well-trained career guidance staff beginning in middle school 			
Notes	 This project was not intended to provide guiding principles or elements; thus, no items are in bold. Information included in the table was gleaned from the docu- ment produced and widely distributed by the project. The Pathways to Prosperity Project was supported by Accenture and the DeVry, General Electric, Pearson, James Irvine, WK Kellogg and Nellie Mae Education Foundations. Source: Symonds, W.C., Schwartz, R.W., & Ferguson, R. (2011) 			



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Conclusion

Using the Illinois guiding principles as the basis for comparison, when examining the other initiatives there appears to be a lack of emphasis on equity as a key factor in many career pathways frameworks. One other area that does not appear as a key element in some models is the importance of professional de-velopment for faculty, administrators and staff. However, many of the initiatives offer professional de-velopment to participating colleges and states (and others) via national meetings, frequent webinars, and other distance learning opportunities. Also, most initiatives have robust websites that include a variety of materials that could be used in professional development activities for administrators, faculty, and staff associated with implementing career pathways.

There are several elements present in other models that could strengthen the current Illinois program of study framework and expand it to serve as a comprehensive career pathways model. A sample of those elements include the following:

- development of state and local policies that promote coordination of pathway development and more seamless and accelerated transition;
- comprehensive student advising that includes wrap-around support services;
- expanded use of structured and transparent course maps and recommended sequences;

designated milestone and gateway courses offered each semester;

- math alignment to majors;
- redesigned developmental education and more consistent cut scores for admission to credit level courses;
- acceleration of developmental (and other) coursework;
- credit hour limits for 2- and 4-year degrees; and
- career pathway metrics for expected outcomes, including labor market attachment.

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