Curriculum Alignment Module

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Attribution to ISBE for Curriculum Alignment Module
This publication was prepared pursuant to a grant from the Illinois State Board of Education and was funded 100% through the federal Race to the Top Funding provided through the American Recovery and Reinvestment Act of 2009. Printed by the Authority of the State of Illinois in June 2013 (600 copies, ISBE Contract Number 2012-06779). The total amount of federal funding involved is $2,861.00, which represents 100% of the cost of producing the publication.

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www.isbe.net

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Acknowledgement
Staff of the Office of Community College Research and Leadership (OCCRL) thank the Illinois State Board of Education, particularly Dora Welker and Harley Hepner, for their persistent and gracious support of the Pathways to Results (PTR) initiative. We also express our thanks to the PTR team leaders and team members throughout the state who have piloted and implemented PTR since its inception. Finally, we thank Linda Iliff for her creative contributions to the design and production work on this publication.

Suggested Citation:

Mordica, J., & Nicholson-Tosh, K. (2013). *Curriculum alignment module*. Champaign, IL: Office of Community College Research and Leadership, University of Illinois at Urbana-Champaign.

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Background

The development of this Curriculum Alignment Module has been motivated by the launch of the Illinois Pathway Initiative (IPI) and the desired implementation of P-20 STEM Programs of Study. This effort is a new approach to ensuring Illinois high school students are fully prepared for college and careers and also complete postsecondary education in greater numbers; 60% by 2025. Supported by a partnership between the State of Illinois' education and economic development agencies, Illinois Pathways supports programs of study that empower students to explore and prepare for their academic and career pursuits while also supporting new public-private partnerships known as STEM Learning Exchanges that coordinate investments, resources, and planning for these programs. The Illinois Pathways Initiative website is available at http://www.illinoisworknet.com/vos_portal/STEM/en/Home/.

An initiative that complements the Illinois Pathways Initiative (IPI) is Pathways to Results (PTR). PTR is an outcomes-focused, equity-guided process to improve programs of study and related policies that support student transitions to and through postsecondary education and employment. P-20 (meaning pre-school through grade 20 or beyond) programs of study that emphasize college and career readiness are at the heart of both the Illinois Pathways and PTR efforts.

Pathways to Results (PTR) is an outcomes-focused, equity-guided process to improve programs and policies that support student transition to and through postsecondary education and employment. PTR focuses on addressing equity gaps between diverse learner groups and continuously improving processes critical to student success, including retention, completion of postsecondary credentials, and transition to employment.

Information about PTR is available on the Office of Community College Research and Leadership (OCCRL) website at http://occrl.illinois.edu/. PTR consists of the following five components:

Engagement and Commitment – Partners and team members collaborate to focus on problems relating to program improvement and development needs to improve student outcomes and enhance program quality.

Outcomes and Equity Assessment – Teams use data to examine program needs and student outcomes. Ensuring the success of all students is of paramount importance, so data are disaggregated by sex, racial/ethnic, low income, and other special populations to identify gaps in achievement.

Process Assessment – Teams analyze core processes (e.g., advising, teaching, learning assessment, curriculum alignment) that relate to the problem and programs of study they seek to improve.

Process Improvement and Evaluation – Teams reach consensus on solutions for the implementation of improved programs of study and develop plans to evaluate the programs' quality over time.

Review and Reflection – Team members, individually and collectively, reflect on lessons learned from engaging in the PTR process. The team develops a plan to sustain the improvements and identifies other programs of study that need to be addressed through PTR.

The PTR process is shown in Figure 1.

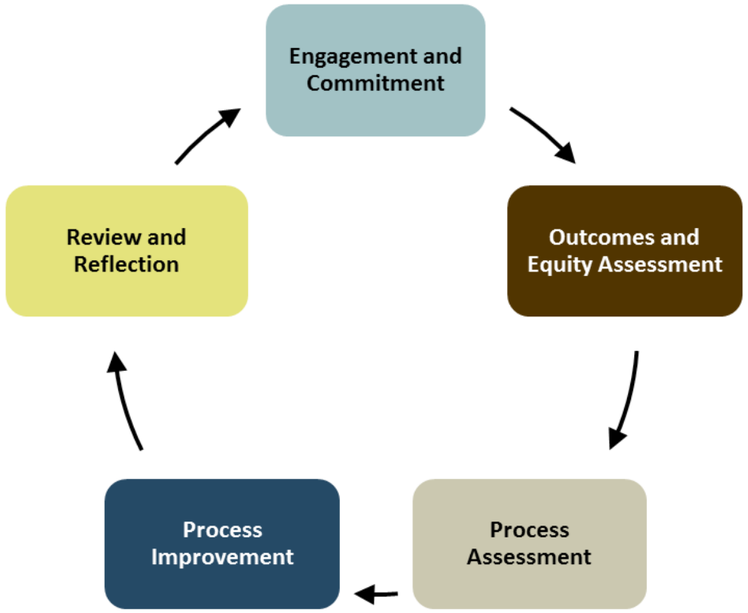


Figure 1. The Pathways to Results process

Curriculum alignment is a process that should be addressed as a part of the Process Assessment and Process Improvement components associated with PTR, as depicted in Figure 2.

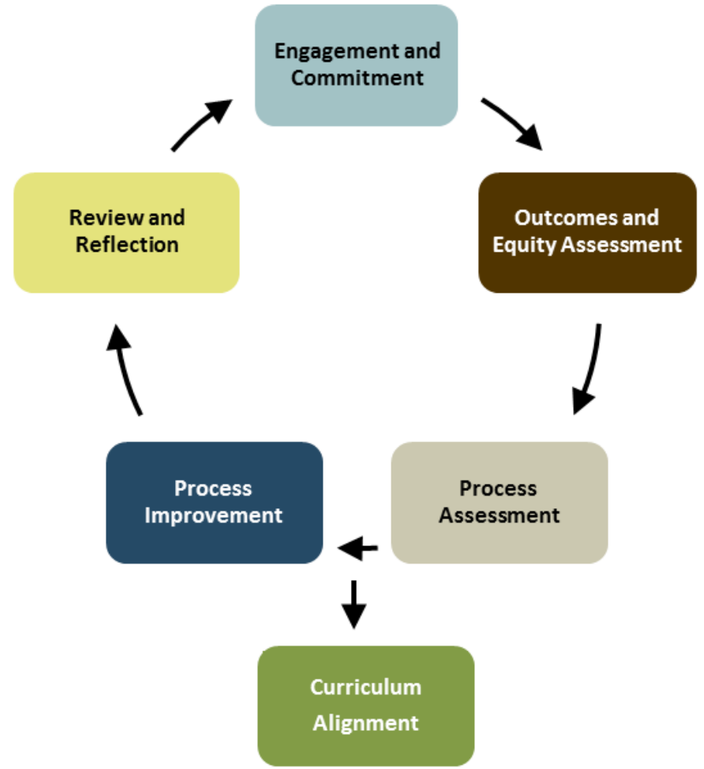


Figure 2. Pathways to Results supplemented with curriculum alignment process

Overview

Curriculum alignment is essential to the development and improvement of a program of study and "can be broadly defined as the degree to which the components of an education system—such as standards, curricula, assessments, and instruction—work together to achieve desired goals" (Case, Jorgenson, & Zucker, 2004, p. 2). Alignment activities provide partners with the opportunity to work together to identify when, where, and how extensively the standards and curricular content associated with a program of study will be addressed. The phases, as identified in this module, appear linear but may be addressed simultaneously.

According to Mausbach and Mooney (2008), foundational concepts inherent in curriculum alignment efforts are: (a) opportunities for instructors to participate in professional development efforts that enhance the process (learn–then do); and (b) opportunities for instructors and content experts to work in teams to plan, review, and improve instruction and work with instructional leaders. Engaging in both of these efforts enhances the quality of alignment results and communication across institutions involved in curriculum alignment efforts.

With respect to Illinois pathways and programs of study, the curriculum alignment process is centered on providing students with pathways through postsecondary degrees via a sequence of non-duplicative secondary and postsecondary courses. Aligned curricula contribute to seamless pathways that result in smooth transitions for students as they move through each level of the educational pipeline (elementary to middle school, middle to high school, and high school to community college and university). Additionally, the alignment of content across the levels of the P–20 system enables students to transition, including exiting and re-entering at various points along the education continuum, with (a) an understanding of what they know and are able to do, (b) a plan to avoid duplicating instruction, and (c) a focus on content that still needs to be mastered whenever students transition and enter the system.

Researchers have noted the importance of connections between curricular alignment and improved student achievement (see, for example, Jacobs, 2004; Wiggins & McTighe, 2005). Most notably, Squires (2012) reviewed research on three alignment categories of curriculum, instruction, and assessment—the CIA of education. His research suggested that school district officials can improve student achievement by aligning the written, taught, and assessed curriculum. Additionally, numerous state and national efforts have encouraged alignment of instruction. In Illinois, the College and Career Readiness Act is focused on bridging the gap between secondary and postsecondary education by ensuring alignment of standards and core academic curriculum, most notably mathematics. The national Common Core State Standards Initiative (http://www.corestandards.org), coordinated by the Council of Chief State School Officers and the National Governors Association, ensures new academic standards are aligned with college and career expectations for the purpose of preparing students for higher education and employment. Also, the federal Carl D. Perkins legislation, last reauthorized in 2006, encourages secondary and postsecondary entities to work together to ensure programs of study are aligned to foster smooth transitions and avoid unnecessary duplication of content.

For local partnerships that are identifying clusters, pathways, and programs of study that need to be implemented or revised, a review of the Illinois Pathways Initiative (IPI) website is strongly encouraged (http://www.illinoisworknet.com/vos_portal/STEM/en/Home/). This website provides relevant course sequences and information about work-based learning opportunities, assessments, and credentials. Information presented on the website pertains to middle school through postsecondary for each industry cluster and their related pathways and programs of study. As a beginning point for partnerships that seek to engage in curriculum alignment efforts, this information can be used to develop a curriculum template that reflects existing courses, course descriptions, assessments, and credentials. Since curriculum is already available for most clusters and related programs through a variety of sources, the value that comes from alignment activities among partnerships is the validation of the following: (a) content is current; (b) content is provided in a sequential manner from introduction, to mastery, to reinforcement; and (c) no gaps or unnecessary duplication exist.

A point not to be missed is that the focus of instruction and learning is on the individual student and her/his needs, which is supported by successful alignment efforts. Working collaboratively, educators who seek to align curriculum find ways to sequence content and support learner achievement and progression so that all students, including those historically underserved by the P–20 system, are able to transition and succeed.

Purpose and Goals

The primary purpose of this module is to assist P–20 partnerships in the curriculum alignment process for P–20 STEM Programs of Study. By STEM, we refer to the full range of disciplinary fields associated with Science, Technology, Engineering, and Mathematics, particularly emphasizing content areas that are neglected by STEM initiatives including career-technical and technology-oriented education.

This module begins by identifying the key instructional staff, administrators, and business and industry partners to address program of study (curriculum) alignment and development needs and ends with planning for the evaluation of these activities. The module outlines steps to assist partnerships in working through relevant tasks involved in aligning curriculum. The steps are appropriate for programs of study in various cluster areas and for developing and improving programs of study in which curriculum has been provided through other sources, such as the Illinois Learning Exchanges.

The goals of this curriculum alignment module are to:

1. identify key partners to address curriculum alignment,
2. identify courses, work-based learning experiences, and assessments and credentials that address student performance in the program of study,
3. conduct a "gap analysis" and improve the alignment of standards and curriculum,
4. identify and adapt aligned resources and instruction,
5. develop agreements among and between institutions to leverage resources and provide a comprehensive program of study, and
6. identify student support strategies and resources.

Outputs

The outputs of this module are as follows:

1. profiles of curriculum alignment partners;
2. a curriculum template identifying courses, work-based learning experiences, and assessments and credentials that compose the program of study from middle school through postsecondary education;
3. identified curricular gaps in knowledge, skills, and/or core standards;
4. re-aligned knowledge, skills, and standards with program of study content;
5. assessment inventory;
6. strategies and agreements for addressing resource and transition needs; and
7. an evaluation plan for curriculum alignment.

Pre-Alignment Activities

This module is grounded in the assumption that the pre-alignment activities listed below have already taken place. Partnerships should begin with the pre-alignment activities prior to taking on the steps outlined for the curriculum alignment process.

1. **Establish a comprehensive industry cluster-based partnership.** As described in the *Pathways to Results (PTR) Engagement and Commitment* module (Nicholson-Tosh, Bragg, & Taylor, 2012), the P-20 partnership advises on activities associated with cluster-related programs of study. This partnership, composed of leaders of P-20 education, business and industry, and community organizations, identifies key challenges and problems facing the specific industry sector and related programs.

   Upon the selection of a key problem associated with industry cluster-related programs, the partnership and each partner commit to addressing the problem with time and resources to ensure that program improvements are made to enhance student performance and success. If the program need cannot be addressed with existing curriculum, the partnership may recommend that a new program of study be developed to address labor market needs. Desired student outcomes for the program of study are identified by the partnership, and an example list of these outcomes is shown in the Resources section of *Pathways to Results (PTR) Engagement and Commitment* module. At this point, a team of professionals who will engage in the day-to-day work of curriculum alignment is identified and a plan of action is developed to guide their work.

2. **Identify, select, and analyze student outcomes data.** The second step involves the collection of demographic and outcomes data to determine how **all** students are performing in the selected program or programs of study. This process includes data from secondary as well as postsecondary levels and identifies gaps in achievement and performance between diverse student groups. It is essential that the team also analyzes data by subgroups (such as race/ethnicity, gender, socio-economic status, etc.) so that potential performance gaps for subgroups can be identified and explored. The team then analyzes and interprets the student results to focus the problem(s) initially identified in the first phase of the improvement effort. This step is aligned with the *Outcomes and Equity Assessment* phase of PTR.

3. **Assess and describe major processes that, if improved, will impact student performance and outcomes.** As part of the *Process Assessment* phase of PTR, the team reviews processes that are key to the overall performance of students in a program or programs of study. For example, suppose that a review of the data shows that the majority of students in a particular program of study are completing all cluster and pathway courses, receiving a certificate or credential at the secondary level, transitioning into a related program of study at the postsecondary level, and leaving the related program of study or the institution prior to completion or credential. This scenario might direct the team to look at the institution's transition process, which may lead to a closer examination of college and career advisement processes and student support services. In cases in which problems with the alignment of the curriculum are found to impede students' successful progress through the curriculum, improving the curriculum alignment process should be identified as the focus of program improvements. For further information about *Process Assessment*, see the *PTR Process Assessment* module (http://occrl.illinois.edu/files/Projects/ptr/Modules/PTR%20Module%204.pdf).

This module is intended to improve a program or programs of study or serve as a beginning point for developing a new program of study, thus enhancing participating student performance and achievement as well as employment opportunities. The curriculum alignment process begins with the identification of the team that will take responsibility for developing an operational plan to complete the alignment effort.

Curriculum Alignment Steps at a Glance

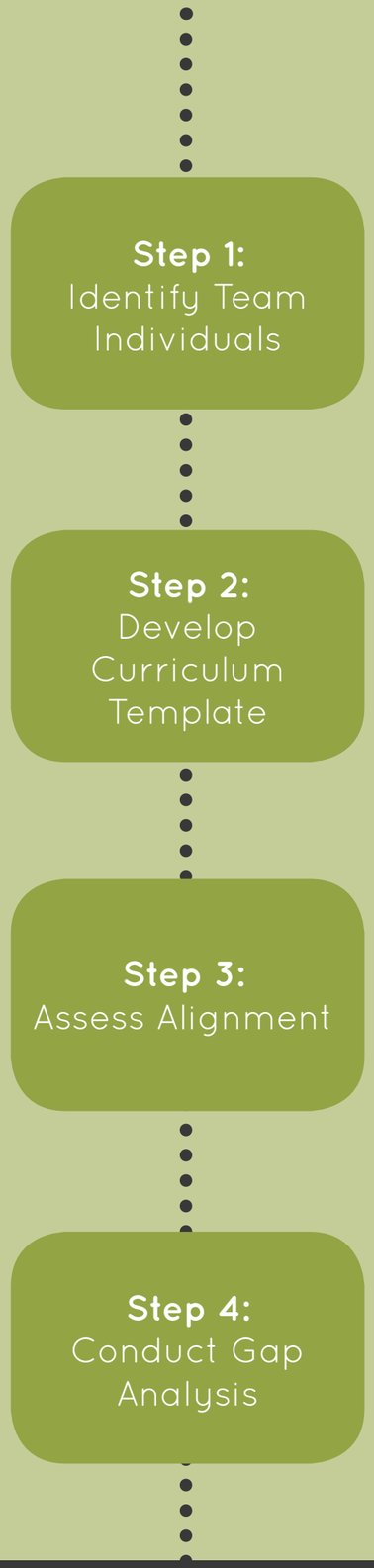
Nine steps associated with the curriculum alignment process are discussed in this module. These steps guide the entire process, from identifying an alignment team to assessing curriculum alignment activities. Worksheets and templates relevant to each step are provided in the Appendices section of this module.

Step 1: Identify individuals to serve on the curriculum alignment team and establish a plan of operation and timeline for the completion of the alignment process.

Step 2: Develop a curriculum template that reflects the current course sequence, course credits, and student learning experiences that are offered at each level of the program of study.

Step 3: Assess the alignment of the current essential knowledge, skills, and dispositions with relevant standards (Common Core State Standards and other academic and technical standards) that are reflected in the current curriculum template to identify gaps and unnecessary duplication.

Step 4: Conduct the gap analysis to identify the new curriculum template that reflects the desired course sequence, course credits, and student learning experiences to be made available at each level of the program of study.



Step 5: Align prerequisite knowledge and skills (with course requirements, assessments, certifications, and credentials to be attained at the completion of each secondary and postsecondary course) and identify, develop, and/or adapt assessments to produce valid and reliable results for all students.

Step 6: Develop lesson plans and identify instructional strategies, emphasizing contextualized, work-based, and problem-based learning opportunities.

Step 7: Identify resources necessary to adapt existing and adopt new curriculum, to access instructional resources, and, as necessary, develop written articulation agreements.

Step 8: Identify and develop student support services and offer individualized strategies to assist students who demonstrate the need for high-level support and assistance.

Step 9: Assess curriculum alignment processes as part of the continuous improvement process.

Detailed Steps

Step 1: Identify individuals to serve on the curriculum alignment team and establish a plan of operation and timeline for the completion of the alignment process.

Selection of the curriculum alignment team offers a beginning point for the pathways and programs of study work. Members of the alignment team should minimally include program of study–related instructional staff from middle schools, secondary institutions, community colleges, and universities. Realizing that the decision to develop or improve a program of study as well as the scope and breadth of the pathway and program of study is determined by the larger partnership, the curriculum alignment team is primarily composed of content experts for each course that is included in the program of study. Curriculum alignment team members do their work collectively and independently, depending on what needs to be accomplished. What is most critical is to develop a plan of operation that allows the team members to do their work in the most productive manner.

Members of the larger partnership, including educational administrators, curriculum specialists, and business and industry representatives, may assist the team with the alignment of content in programs and related coursework. These secondary and postsecondary leaders also may assist in setting the vision and offering insights into how the curriculum alignment team might want to approach its work.

With the support of these leaders, a plan and timeline for implementing the improved curriculum should be established. Discussions about the desired outcomes that students should attain will assist the team's engagement in the curriculum alignment process. Two types of alignment that are commonly conducted by teams are horizontal and vertical alignment. *Horizontal alignment* focuses on alignment across a similar grade level and subject matter. This type of alignment addresses the alignment of core academics (English, mathematics, science, social studies, etc.) as well as the integration of these subjects with career and technical coursework. *Vertical alignment* focuses on alignment from one grade level or institutional level to the next in like subjects or curriculum content. This type of alignment usually involves secondary and postsecondary content experts and instructors who address the various subjects sequentially.

At a minimum, a useful composition of a curriculum alignment team includes the following individuals:

1. English and STEM area content experts, including CTE instructors, curriculum specialists, and/or department chairs at the middle, secondary, and postsecondary levels;
2. other curriculum and instructional leaders at the middle, secondary, and postsecondary levels;
3. educational technology experts;
4. student support service personnel, including counseling, academic advising, and career advising;
5. business and industry content experts related to the program of study; and
6. community–based organizations that provide academic, career, and personal supports to diverse student populations.

Determination of each team member's role—whether responsible for addressing horizontal alignment or vertical alignment—provides a clear picture of the individuals who need to be included on the team. Key to effective and efficient team operation is a qualified team facilitator to help the team conduct alignment activities and meet the timeline identified in the operational plan. Appendix A provides a template for identifying alignment team members and their respective roles. Appendix B provides a template for a plan of operation and timeline.

STEP 2: Develop a curriculum template that reflects the current course sequence, course credits, and student learning experiences that are offered at each level of the program of study.

The development of a curriculum template that is focused on the curriculum as it exists today assists in the identification of courses and experiences that currently compose the program of study. Alignment of the course content to standards (Common Core State Standards and other academic and technical standards) helps to establish the breadth and scope of the program of study. The Illinois Pathways Initiative (IPI) website (http://www.illinoisworknet.com/vos_portal/Stem/en/Home) provides a comprehensive picture of potential courses and student learning experiences that make up the pathways in the nine STEM clusters identified in Illinois. These clusters were identified for the IPI because they have been deemed by various economic, workforce, and industry groups as paramount to the state's economic development. By cross–walking the Illinois State Board of Education (ISBE) and the Illinois Community College Board (ICCB) Illinois Articulation Initiative (IAI) course descriptions, the template can help in identifying potential gaps in the curriculum. Where gaps exist, it may be useful for the team to consider adding team members to supplement the curriculum alignment team. Appendix C provides a curriculum template.

STEP 3: Assess the alignment of the current essential knowledge, skills, and dispositions with relevant standards (Common Core State Standards and other academic and technical standards) that are reflected in the current curriculum template to identify gaps and unnecessary duplication.

In this step, the standards that define the breadth and scope of the program of study are reviewed and aligned with the courses and student learning experiences identified on the curriculum template. Standards that inform the breadth and scope of the program of study include:

1. Common Core State Standards (CCSS) in English, math, and science;
2. Illinois Learning Standards in content areas not included in the CCSS;
3. College and Career Readiness Standards developed through CCSS;
4. Career and Technical Standards, knowledge, and skills as defined by professional certifying/credentialing bodies and other initiatives;
5. 21st Century Skills/Employability Skills; and
6. Information Technology Standards.

A review of the standards (i.e., identification of where they are currently being addressed, where there are gaps, and where they should be addressed) is completed in this step. This process ensures the content is current and sequenced in a way that is meaningful to learners. The intensity of instruction within each course and level (e.g., introduced, mastered, and/or reinforced) is identified for each standard, knowledge, and skill. Additionally, where and when standards are assessed is determined.

Because information technology (IT) impacts every program of study, standards associated with the IT cluster and related pathways and occupations are reviewed to determine their applicability to the identified program of study. Appendices D and E provide templates for use in this process.

STEP 4: Conduct the gap analysis to identify the new curriculum template that reflects the desired course sequence, course credits, and student learning experiences to be made available at each level of the program of study.

In this step a second curriculum template is developed. This template accommodates those standards that have been identified for inclusion in the program of study but may not be currently addressed in the courses comprising the program of study. At this time a determination is made regarding whether new courses need to be added to the program of study sequence or if existing courses can be modified to address the new standards, knowledge, and skills. In the case of an entirely new program of study, standards are aligned with all the courses and student learning experiences are identified as a part of the course sequence.

The Illinois Pathways Initiative (IPI) website is a valuable resource for development of the curriculum template that reflects the course sequence and student learning experiences of the desired program of study for the nine Illinois STEM clusters. For career clusters areas in addition to the nine that are addressed on the IPI website, the National Association of State Directors of Career Technical Education Consortium (http://www.careertech.org/) is an excellent resource to provide course sequences for review and reflection.

Also, at this point, curriculum mapping can begin. Through curriculum mapping, each instructor develops a framework of instructional units relating to the pertinent standards and objectives, producing a visual that can be developed and discussed among like-content area instructors, as well as instructors of different subject matter for cross-curriculum connections. Among other advantages, curriculum mapping can help in (a) the allocation of time for each unit of instruction, (b) the identification of when to use instructor-directed or student-directed instruction, c) types of assessments that may be useful, and (d) resource sharing opportunities.

STEP 5: Align prerequisite knowledge and skills (with course requirements, assessments, certifications, and credentials to be attained at the completion of each secondary and postsecondary course) and identify, develop, and/or adapt assessments that produce valid and reliable results for all students.

This step involves looking at a program of study from the most advanced coursework and certification/credential to be attained at the completion of the program of study—a process that is called "back-mapping." This approach provides a picture of the prerequisite knowledge and skills for each course and the level of instruction leading to completion. Additionally, this review provides the key concepts and foundational themes that permeate the entire program of study, which is a necessary discovery for establishing or improving a career-focused orientation course and relevant STEM applications.

Determining the types of assessments that are needed to measure student performance, as well as program improvements needed after curricular alignment modifications are in place, is key to continuously improving the program. These assessments include the following:

- *Formative Assessments*: Formative assessments generally are ongoing in-class assessments carried out throughout a course. They provide feedback on each student's work and help the teacher to make needed adjustments in instruction on an ongoing basis. Formative assessments are integrated into the instructional process. Schools or districts also may develop benchmark assessments to be administered at varied intervals throughout the academic year, as a mechanism to provide feedback to teachers and students about their progress toward identified standards. Formative assessments, including informal in-classroom and benchmark assessments, provide opportunities for teachers to modify their instruction, reteach essential content, and provide extended learning opportunities to ensure that students master essential content.
- *Summative Assessments:* Summative assessments are conducted to determine a student's acquisition of content, and may be referred to as "high-stakes" assessments if they are the basis for student progression through the P-20 system. Sometimes tied to accountability, assessments are given to ascertain a student's performance as well as an institution's or district's performance, at the end of a classroom unit or semester.

Both formative and summative assessments may inform the continuous improvement of a program of study, as well as the employability of students. A first step is to inventory the assessments that are given to students on an institution-wide basis (both benchmark and summative assessments), identifying when they are given. This inventory includes determining what knowledge, skills, and standards are measured, and establishing how to inform success of the program of study. Second, a review of existing assessments should include examining alignment with content and occupational standards associated with the program of study. Finally, the identification and modification of assessments is conducted to eliminate gaps between the curriculum and assessment instruments. Templates to develop an inventory of assessments relevant to programs of study can be found in Appendix F.

STEP 6: Develop lesson plans and identify instructional strategies, emphasizing contextualized, work-based, and problem-based learning opportunities.

During this step, the identification of how knowledge, skills, and standards will be taught, occurs. Consideration is given to the level of content acquisition desired, as well as the variety of learning styles demonstrated by the students. Ensuring there are multiple approaches to addressing the same content is essential, especially if addressing a level and/or course in which specific content is to be mastered. Opportunities to apply concepts to

real-world situations and careers, as well as to analyze and synthesize key concepts are key to instructional considerations. Appendix G provides a template for use in the identification of instructional strategies.

Work-based learning is an important component of programs of study. It is an instructional strategy that is key to preparing students for success in postsecondary education and careers. All work-based learning experiences involve interaction with industry or community professionals and are tied to student outcomes, from the provision of resource speakers in the classroom, to field trips, to intensive internships or apprenticeships in the workplace as a capstone educational experience. According to the National Academy Foundation (2012):

> Work-based learning refers to a continuum of activities, both in and outside the classroom, that provide opportunities for students to connect what they are learning in the classroom to the world of work; to learn about careers and the education and training requirements for occupations within and across industries; to identify career interests and aptitudes, and to use the workplace for both learning and applying college- and career-readiness skills and knowledge. (p. 4)

Following the progression of career education, including career awareness, exploration, orientation, and preparation, the work-based learning strategies suggested by the National Academy Foundation and utilized in Illinois reflect experiences that increase in intensity as a student progresses through the educational pipeline.

STEP 7: Identify resources necessary to adapt existing and adopt new curriculum, to access instructional resources, and, as necessary, develop written articulation agreements.

Once gaps and redundancies in content are located at the course and education level, after these gaps and redundancies in curriculum and instructional strategies have been established, opportunities for credit-generating alternatives (i.e., dual credit, articulated credit, credit by examination) can be discussed and articulation agreements can be developed. Because alignment is aimed at providing for smooth transitions of each and every student from one level to the next, articulation agreements between secondary and postsecondary institutions and between community colleges and universities are developed.

In addition to credit-generating alternatives, key discussions and considerations regarding articulation agreements might include the sharing of facilities and equipment, the sharing of instructional staff, the creation of work-based learning experiences, the delivery of professional development, the consultation with businesses, and the pursuit of additional funding and other resources necessary for the implementation of new programs of study. This step also guides the partnership through defining which department, institution, or business partner is responsible for implementation of the agreed-upon courses.

Career guidance and student services personnel are consulted regarding strategies that will facilitate the successful transition of students from high school to the community college or university. Additionally, supports for adult students to enter or re-enter the educational system via a program of study are identified. Two templates are offered for this step:

Appendix H – Prioritization of instructional resources and equipment

Appendix I – Program-specific resource sharing and transition planning

STEP 8: Identify and develop student support services and offer individualized strategies to assist students who demonstrate the need for high-level support and assistance.

The development of a strategy to assist students who require support in various and possibly all subject matter areas—science, technology, math, reading, and CTE content, as well as other supports—is a critical part of the curriculum alignment process. Establishing an institution-wide support strategy as well as program-based strategies for enhancing the potential of all students to attain critical knowledge and skills is addressed during this step. Again, a focus on individual learning styles and needs is critical in this conversation.

STEP 9: Assess curriculum alignment processes as part of the continuous improvement process.

At this point, evaluation measures are identified to determine the effectiveness of the improvement strategy; in this case, a new and improved curriculum alignment process. Student performance data derived from summative assessments, as described in Step 5 of this process, are collected and analyzed by the curriculum alignment team and shared with the local partnership to aid in identifying new challenges and opportunities facing P-20 education and programs of study.

Appendix J provides a template for developing an evaluation plan to track the progress of improvement strategy or program implementation, as well as program and student outcomes. (See PTR Phase 4, Process Improvement and Evaluation, for additional information on the development of evaluation plans to support the continuous improvement of programs of study.)

In addition to the nine steps of curriculum alignment outlined in this module, related background information may be helpful as practitioners as move through the alignment process. For this reason, the *Additional Resources* section (beginning on page 17) lists publications and websites that are relevant to various aspects of implementing programs of study.

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Additional Resources

Curriculum Alignment

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APPENDIX A
CURRICULUM ALIGNMENT TEAM MEMBERS

Role	Name/Institution	Course(s)/Content Team
Secondary Content Experts		
Postsecondary Content Experts		
Administrators		
Guidance and Counseling/Advisors and Support Services		
University Partners		
Business Partners		
Team Facilitators		

APPENDIX B
OPERATIONAL PLAN FOR CURRICULUM ALIGNMENT

Program of Study: _____

Goals	Tasks	Completion Date	Team/Person Responsible	Other Notes

APPENDIX C
CURRICULUM TEMPLATE

Name of Cluster_____ **Name of Pathway**_____ **Program of Study**_____

Education Levels	Grade	English	Math	Science	Social Studies/ Sciences	Other Required Courses, Recommended Electives, and Learner Activities	Career and Technical Courses and/ or Degree Major Courses	Work-based Learning Experiences	Assessments/ Certifications	SAMPLE Occupations Relating to this Pathway
Interest Inventory Administered										
Secondary	9					All plans of study need to meet **local and state** high school graduation requirements as well as college entrance requirements.				
	10									
	11									
	12									
Articulation/Dual Credit Transcripted										
Postsecondary	Year 13					All plans of study need to meet learners' career goals with regard to required degrees, licenses, certifications or journey worker status.				
	Year 14									
	Year 15									
	Year 16									

Source: Adapted from the Illinois Community College Board

APPENDIX D
GAP ANALYSIS TEMPLATE

Essential Knowledge and Skills	Middle School	Secondary	2-Year College	4-Year College
Academic Foundations				
Systems				
Leadership and Teamwork				
Safety, Health, and Environmental				

Other Standards				
Common Core Standards (Language Arts, Mathematics, Science)	**Middle School**	**Secondary**	**2-Year College**	**4-Year College**
Specific Occupational Skills Standard				
Specific Employer Standards				

Legend
I-Introduced
R- Reinforced
M- Mastered

APPENDIX E (COMMUNITY COLLEGE)
ALIGNMENT OF KNOWLEDGE, SKILLS, STANDARDS WITH COURSES AT THE COMMUNITY COLLEGE LEVEL

Knowledge/Skills/ Standards	Course Title and Codes			
Academic Foundations	**Course 1**	**Course 2**	**Course 3**	**Course 4**
Systems	**Course 1**	**Course 2**	**Course 3**	**Course 4**
Leadership and Teamwork	**Course 1**	**Course 2**	**Course 3**	**Course 4**
Safety, Health, and Environmental	**Course 1**	**Course 2**	**Course 3**	**Course 4**

Knowledge/Skills/ Standards	Course Title and Codes			
Common Core Standards	**Course 1**	**Course 2**	**Course 3**	**Course 4**
Specific Occupational Skills Standard	**Course 1**	**Course 2**	**Course 3**	**Course 4**
Specific Employer Standards	**Course 1**	**Course 2**	**Course 3**	**Course 4**

APPENDIX F
ASSESSMENT INVENTORY

CLUSTER: _____

PATHWAY: _____

PROGRAM OF STUDY: _____

Grade Level	Assessment Name	Content Assessed	Assessment Use	Comparative Assessment/Year
Example 8th Grade	EXPLORE	Math, Language Arts	Pre-Test for Math, Language Arts	PLAN/spring, freshman year

APPENDIX G
IDENTIFICATION OF INSTRUCTIONAL STRATEGIES

CLUSTER: _____

PATHWAY: _____

PROGRAM OF STUDY: _____

Standards, Knowledge, Skills	Related Objectives and Sequence	Pre-Test/ Assessment	Media/ Technology	Work-Based Learning Experience	Other Instructional Strategies

APPENDIX H
EQUIPMENT/RESOURCE PRIORITIZATION

Equipment and Supplies (textbooks, teaching tools, etc.)	Critical (√)	Helpful (√)
[list each item here]		
Education/Professional Development	**Critical**	**Helpful**
Substantial Budgetary Requirements (new/redesigned space, personnel, operating funds, licensing costs, etc.)	**Critical**	**Helpful**
Other (technical assistance, work-based learning opportunities, dual credit and articulation agreements, etc.)	**Critical**	**Helpful**

APPENDIX I
PROGRAM OF STUDY RESOURCE SHARING AGREEMENT

CLUSTER: _____

PATHWAY: _____

PROGRAM OF STUDY: _____

Agency/Institution and Resource Cost	Program Instructor(s)	Materials and Equipment	Work-Based Learning Supervision/ Site	Professional Development	Support/ Transition Services	Assessments Certificates/ Credentials	Career Guidance and Advisement

Course/POS Credit Articulation Agreement

District Name	District Course Title	Course Code/ID	Credits	Program Name/Code

Signatures of Participating Secondary and Postsecondary Institution

_____ _____

Secondary Institution **Postsecondary Institution**

APPENDIX J
EVALUATION PLAN

Goal: [Insert a relevant goal here**]**

Example: Provide work-based opportunities that are aligned with key secondary and postsecondary courses to benefit intended student audiences and career pathways.

Evaluation Question *[Impact being measured]*	**Data Collection** *[Data collection method being used]*	**Measurement Indices** *[Sources of data]*	**Analysis** *[Type of analysis]*	**Responsibility** *[Team members responsible]*	**Timeline** *[Begin and end date]*
Example: To what extent did the newly aligned work-based opportunities reach the intended audiences?	Document Review Data Request from existing databases	Number of newly aligned work-based opportunities offered Enrollment records Student attendance records	Descriptive Analysis: percentages of students enrolled in work-based opportunity disaggregated by ethnicity	Work-based opportunity Team Leader Secondary Data Specialist Postsecondary Institutional Research Specialist	Sept 2014 – Sept 2015
Example: What were the benefits of the newly aligned work-based opportunities from the students' perspective?	Focus group	Student participants	Qualitative Analysis	Data Specialist School Principal Team Leaders	April 2015 – May 2015

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