

**SECTION 1: ASSESSING WHETHER
WORK-BASED COURSES ARE
RIGHT FOR YOUR**

COLLEGE

**ARE YOU EVER READY TO TOTALLY TRANSFORM
THE WAY YOU DO BUSINESS?**

—Cindy Fiorella, Owensboro Community and Technical College



Increasingly, community colleges are recognized for their flexibility in responding to the latest innovations within industry. Colleges change in part through the evolution of their existing educational models and content. But colleges can also change by adopting new programs and models that expand their offerings and tie learning more directly to industry needs and innovation. As a promising new model, work-based courses, build on other forms of work-based learning while formalizing the process for and recognition of instruction that occurs on the job. The design integrates instruction in the classroom and at work more seamlessly than other forms of work-based learning. Yet, developing and implementing work-based courses is a complex process that requires significant collaboration between community college and industry leaders.



Community colleges considering whether to adopt work-based courses should begin by determining whether this model adds value that serves its educational goals by preparing students for learning and for work. They should also consider whether work-based courses resonate with the needs they have heard from employers and with the roles their employer partners seek to play in the development of their talent pipeline. If a college does have a preliminary interest in work-based courses and a vision for how they can fit into the college's educational programs and pathways, it should assess whether it is institutionally ready to develop and implement the new model. This assessment is a critical first step in deciding whether to pursue the development of a work-based course program, and it should happen before any planning efforts to design and adopt the model.

THE ADDED VALUE OF WORK-BASED COURSES

Work-based courses build on several existing types of work-based learning, including internships, apprenticeships, and on-the-job training. Because they are actual college courses, work-based courses can play a unique role in a manufacturing program at a community college.

Owensboro Community and Technical College (OCTC), which has a long history of deep relationships with manufacturers in their region, decided to implement a work-based course model because it provides benefits to students, such as structured learning on the job, relatively early in their manufacturing education, not available through other forms of work-based learning. The college already partnered with employers to deliver work-based learning opportunities, but as OCTC President Scott Williams describes it, none delivered the same benefit of the worker's early exposure to the workplace:

[A]pprenticeships and internships are quite effective, but they only really work at the tail end of the program where the person's got enough skill level to go in and address a need. So, from the standpoint of work-based learning, we think as an institution this [work-based course model] is really heading us in a good direction. The flexibility of allowing somebody to get on-the-job training and work, learn and immerse themselves with the industry sector that they have an interest in, and combine that with the educational training is the best of all worlds.

Work-based courses are valuable to employers as tools for developing incumbent workers and building a talent pipeline within the company. When OCTC convened regional manufacturers to gauge their interest in work-based courses, one employer identified the value of work-based courses by noting that the company currently had to hire from outside to fill its apprenticeship openings because their incumbent workers were unable to meet the entrance requirements. A rigorous but shorter-term program like work-based courses could elevate the skill level of their workers to take advantage of their apprenticeship program and provide a more direct recruitment path for the company.

Manufacturers partnering with OCTC also value the fact that recognized work-based courses go beyond other forms of work-based learning to incorporate their company training into an academic course structure. Tim Sheldon, Organizational Effectiveness Specialist, notes that

the degree is a huge benefit to us at Kimberly-Clark and to . . . our employees. . . . The education paired up with the real job experience really fast-forwards people to be ready to work in a manufacturing environment, whereas just a normal person who did not have any degree or education [will] have to learn that through on-the-job training, which takes longer than what they could get with the classroom and the degree.

Finally, work-based courses enable employers to encourage workers to complete college. William Mounts, Vice President of OMICO Plastics, explains:

“It is very important to me to see that diploma, not only from the business side, but also see [workers] from the personal side [because] they could take that anywhere that they want to. If they decide that they’re going to move to Boston or to New York, they have that opportunity, they have that diploma.”

Colleges should consider how to integrate work-based courses into larger educational programs and career pathways in order to maximize their value for their programs, students, and employers. Are there critical points in a career pathway that would be best served by this model, perhaps overcoming existing barriers to advancement? Should individual work-based courses that are strategic priorities stand alone, or should work-based courses be combined and stacked as their own pathway? Answering these questions about where and how work-based courses fit in also provides early guidance about whether and how they should be adopted.

STRONG RELATIONSHIPS ARE AN ESSENTIAL STARTING POINT

OCTC attributes its success with work-based courses to the fact that the college already had strong supports within and among the key constituents of the model. OCTC President Scott Williams explains that there are

“three levels of communities that you’ve got to work with here. One of them is the student community and the parents of those students, or the adult learner. The second one is your internal community, your faculty and staff. And the third is...business and industry...Why we’ve been able to move in this direction fairly successfully and rather rapidly...is we have a tremendous ability to communicate amongst those different levels...We have very strong working relationships with the college and its academic programs and our workforce solution economic development arm of the college and business and industry sectors.”

Without strong relationships with each of those “levels of community” already in place, it will be difficult to launch a work-based course program. Program administrators should evaluate whether they have the necessary internal and external supports to make work-based courses possible. College supports look different in different places, but flexibility—in designing and developing curricula, allocating funding and other forms—is an underlying attribute that can help launch a new model such as work-based courses, and program administrators should work to identify the points of flexibility in their institutions.

Strong relationships with manufacturing employers and others are also essential prerequisites for developing work-based courses. Given the central role of employers in work-based courses, this model will be extremely challenging to launch unless the college already has an understanding of the regional manufacturing economy and trusted, collaborative relationships with some of their local employers. Does yours? Community colleges with limited histories working with employers can begin with [JFF’s Employer Engagement Toolkit: From Placement to Partners](#) or [A Resource Guide to Engaging Employers](#) for ideas on how to build more robust employer partnerships. Once the community college is comfortable working with and responding to employer needs, it can return to the question of whether to implement work-based courses.

A community college with strong institutional support, innovative faculty, and actively engaged employers can call upon each of those stakeholders to determine whether work-based courses add value to their manufacturing education and training efforts.

This section focuses on assessing whether work-based courses are a good choice for your institution. Tool 1-1 provides a framework to compare work-based courses to other models of work-based learning, and to select the model that meets current program needs. Tool 1-2 sets framing considerations for whether and how you would like to combine work-based courses; Tool 1-3 provides samples of how work-based courses can be embedded in a community college’s career pathways, and Tool 1-4 provides an in-depth assessment of institutional readiness to develop work-based courses.

TOOL 1-1: SELECTING AN APPROACH TO WORK-BASED LEARNING

Type of Tool: Worksheet

Summary: This worksheet is the first step in deciding whether and how to add work-based learning to your program. While you should also consider what work-based learning opportunities your program and college already provide, this tool focuses only on the attributes of the new opportunities that interest you. First, it makes the needs and goals of each stakeholder—the college, the employer, and the student—explicit. Second, it allows you to compare your responses to an overview table of work-based courses and several other common models of work-based learning. You can use this exercise as a way to identify the model or models that could best enrich your program.

Why: There are many different work-based learning models, and it is best to understand the merits and requirements of each before committing to one. These considerations guide a selection that makes the most sense for your college, students, and employer partners. Many colleges pursue multiple work-based learning strategies that complement each other at different stages of a student's education or that connect with formal education pathways in different ways. Regardless of how many models you choose, each approach will have more buy-in and foster educational and career success if it is driven by the needs shared by employers, students, and colleges.

Who Should Use this Tool: Program administrators

Spotlight on OCTC: Owensboro Community and Technical College had employed a variety of work-based learning approaches in multiple departments before considering introducing a new model to their manufacturing program.

Work-based learning is when a college works hand-in-glove with an employer partner to accelerate the pace of learning by...not only reinforce[ing concepts] at the workplace from the classroom instruction, but also... capture[ing] the instruction that takes place day to day in any type of production process.

Cindy Fiorella, Vice President of Workforce Solutions at the college, notes that compared with other forms of work-based learning, what is

unique about the work-based [course] model is we've said, 'Okay, this is what we would traditionally have in a course. It aligns with what the industry is wanting as far as skills. Check those off the list to assign credits.'

STEP ONE

Ask yourself what you are looking for by adding work-based learning to your academic courses or technical training. Remember that you may choose different approaches for different pieces of a manufacturing program, so focus on your needs for a single course or a single target population.

I am exploring work-based learning as a strategy within our manufacturing program to (i.e., enrich existing courses, expand our curriculum, serve incumbent workers, better meet the needs of area employers):

The community college would like to (check all that apply):

Add work-based learning to an existing course

Create a new course with work-based learning

Lead educational design and delivery

Support the efforts of an employer

Identify work-based learning opportunities that are:

Short-term

Long-term

Offer industry-recognized credentials to our students:

Yes

No

Our employer partners (check all that apply):

Have not yet been identified

Are identified but not actively engaged

Are highly committed

Have expressed interest in:

Helping design training

Providing training

Investing directly in workers

Have turned down training opportunities before because of internal issues such as training budget cuts, scheduling conflicts, time required away from the job, etc.:

Yes

No

Our potential work-based learning students:

Are working toward an A.A. or A.A.S degree:

Yes

No

Include incumbent workers:

Yes

No

Need to earn income while enrolled in education and training:

Yes

No

STEP TWO

Compare your responses to the table that follows, summarizing different common work-based learning models and see which options meet your needs. The work-based learning models described are:

- **Problem-based learning:** Classroom teaching approach that emphasizes practical and hands-on experiences that mimic the workplace
- **Job Shadowing and On-Site Tour:** As part of a course, employer hosts students to observe workplace and/or employees in relevant occupations
- **Internship:** Student supplements academic coursework for a bounded period of paid or unpaid real work experience that includes guided learning opportunities provided by employer
- **Work-based courses:** Academic courses are designed, taught, and assessed in a way that integrates real job responsibilities throughout
- **On-the-Job Training:** Employer provides formalized training on the job site that is needed for specific occupations
- **Apprenticeship:** Combination of formalized work-based learning and classroom learning to develop highly skilled workers

For more information about these models, see JFF's publications, "Making Work-Based Learning Work" and "Work-Based Learning in Action," a series of case studies at jff.org/publications.

The model that best meets our current needs is: _____

This is only a first step in a larger process to select, design, and implement a work-based learning model. Other factors influencing appropriateness and feasibility, such as resources, will need to be examined throughout the decision-making process.



Summary of Work-based Learning Models

	Problem-Based Learning	Job Shadowing or On-site Tour	Internship (co-op, paid, unpaid)	Work-Based Courses	On-the-Job Training	Apprenticeship
Degree Learning Integrates work	Simulated	Observe but not doing	Related, not always closely	Highly intentional	Basis of delivery	Basis of delivery
Involvement of College	Activities are housed in classroom	Embedded in college course	Complements college activity	Organized through college	Not necessarily involved	Can partner for credit or classroom component, not main provider
Involvement of Employer	None, but may provide ideas	Host short-term activities	Sponsor and supervise	Lead much of delivery, working with faculty	Design and deliver	Design and deliver
Credentialing	Supports college credit	Can support college credit	Can support college credit	College credit	None, unless choose to include industry-recognized credential	Registered apprenticeship is naturally recognized and can design for college credit
Earn While You Learn	No	No	Sometimes paid	Yes	Yes	Yes
Duration	Short-term	Short-term	Limited duration, full- or part-time	Semester-based	Ranges (usually 4-20 weeks)	Up to several years
Internal Issues for Employers	None	Limited	Depends on who pays intern	Determined by college, goal is to minimize employer process	Public system has high demand process	Process for both registration and delivery

STEP THREE

1.7 Start planning your activities. This toolkit can help you with the planning and implementation of work-based courses.

TOOL 1-2: WORK-BASED COURSES AS BUILDING BLOCKS

Type of Tool: Worksheet

Summary: A work-based course is not a program, but rather a specific delivery format for course content that can be built into any variety of program structures. An individual work-based course functions as a block that can be stacked with other work-based courses or traditional courses to build a program. This tool offers guiding questions to help community colleges set initial expectations for using work-based courses as building blocks. Considerations about college and employer goals, instructional opportunities and constraints, and resources can help program administrators decide whether to:

- Offer targeted, individual work-based courses that do not combine into a work-based pathway
- Launch individual work-based courses with the goal of building out to a work-based certificate or degree program after the model is tested and proven
- Create a work-based course pathway that spans a full certificate or degree program

Why: The structure of how work-based courses fit together does not have to be fixed from the outset. Community colleges can move from offering targeted courses to a full certificate or degree, or they can narrow the focus to a few in-demand work-based courses after first offering a broader range of courses. However, your initial expectations for how to use work-based courses as building blocks could have implications for course selection and program design. For example, colleges that expect to offer only select work-based courses might focus on advanced, high-demand courses that can lead to career advancement with little or no additional education. Colleges aiming to stack the courses to a full degree might begin by adapting introductory level courses and then, as students progress, redesign increasingly advanced courses.

Who Should Use this Tool: Program administrators, faculty

Spotlight on OCTC: When OCTC began planning the introduction of work-based courses in their Advanced Manufacturing Technologies program, leadership in the Workforce Solutions division hoped that the approach could change how they worked with employers to design incumbent worker training. Before talking to employers, OCTC expected to launch with introductory technical courses that could lead to multiple certificates or degrees. Instead, employers requested that OCTC first adapt higher-level work-based courses, in part out of concern that introductory-level learning could be a risk to their equipment and disrupt their production process. After proving their value by implementing about a dozen work-based courses across numerous companies, OCTC has been able to combine introductory and advanced work-based courses as the core of a work-based Advanced Manufacturing Technician associates degree. This is one of many ways that work-based courses are now integrated into the partnerships that OCTC builds with manufacturers.

WORK-BASED COURSES: INDIVIDUAL BLOCKS OR STACKED PATHWAY?

Ten questions about the goals and resources of your college and employer partners can help frame your thought process about whether to adapt a few targeted work-based courses within a traditional program, or to redesign an entire work-based pathway.

Select the appropriate answer for each question, and then discuss your answers in more detail with your planning team. If the majority of responses line up with one column, you might consider that approach in more depth. You can also use the explanation column to note if some considerations are a higher priority in your decisions about how to use work-based courses as program building blocks.

	Targeted Courses		Work-Based Pathway	Explain
Is your primary goal to create new...	entry points to certificate and degree programs	- OR -	formats for earning that degree?	
Do working students have high attrition rates?	No	- OR -	Yes	
Do you have sufficient resources to redesign...	only a few select courses	- OR -	a wide range of courses?	
Is there broad faculty interest and ability in teaching courses this way?	No	- OR -	Yes	
Do employers have a need primarily to...	fill immediate talent gaps	- OR -	create new pathways for advancement?	
Are employers in the region expressing a need for...	training for targeted in-demand skills	- OR -	intensively skilling up its workforce?	
Do employers provide resources (i.e., tuition reimbursement, flexible scheduling) for employees to enroll in college?	Yes	- OR -	No	
Do employers currently have uptake on resources for college enrollment?	Yes	- OR -	No	
When selecting courses to redesign, do employers...	coalesce around a few courses	- OR -	request a wide range of courses?	
Are employers comfortable with workers learning and practicing course content on the job...	only after demonstrating some technical proficiency	- OR -	for technical courses of all levels?	

TOOL 1-3: CAREER PATHWAYS

Type of Tool: Sample pathways

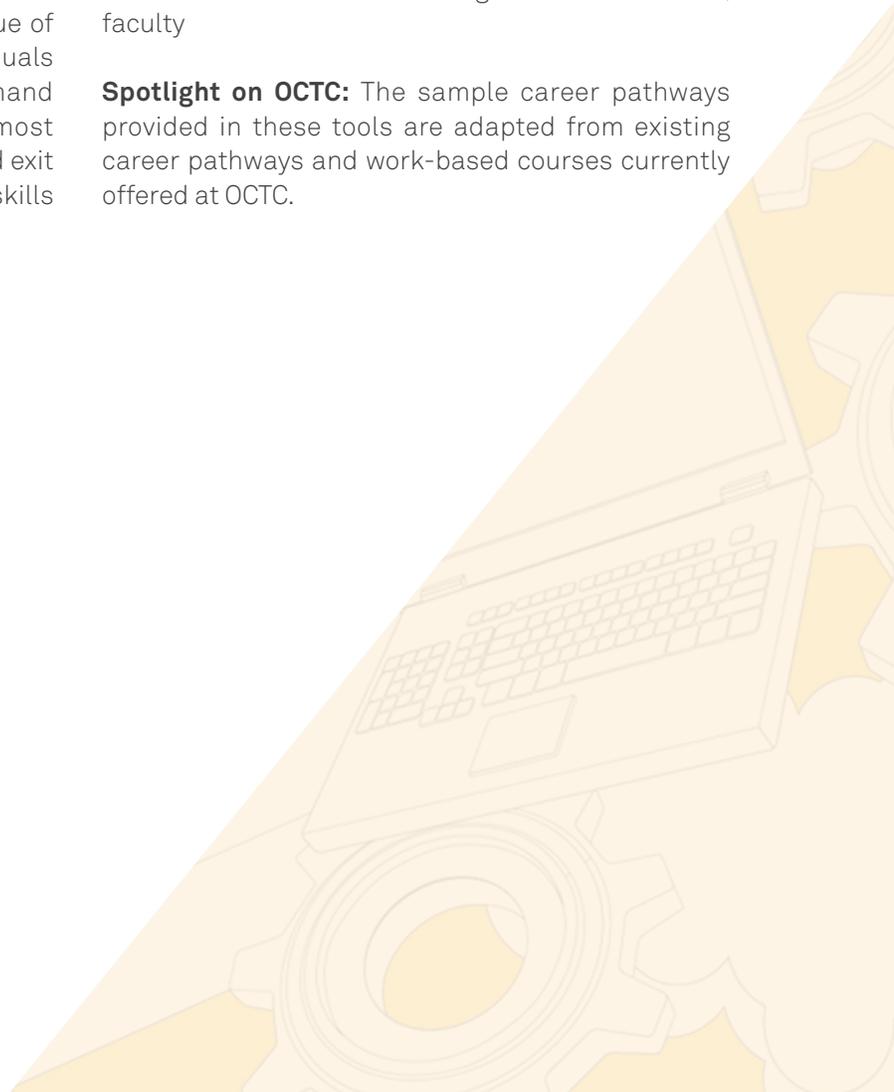
Summary: This tool provides examples of how work-based courses can fit into manufacturing career pathways developed by community colleges. The first career pathway illustrates how select work-based courses can be strategically placed within key points of a career pathway to advance workers. Students and workers progress through the bulk of the pathway using existing workforce development opportunities such as academic courses, the attainment of industry recognized credentials, or on-the-job training from their employer. In the second example, work-based courses are at the center of each step of the career pathway. These courses may not be appropriate for every component of the pathway, but traditional education and training is used to supplement the work-based courses, rather than the other way around.

Why: Work-based courses will be more valuable if they have an intentional connection to a broader strategy to advance the students who enroll in them, and career pathways provide such a structure. Career pathways sequence education and training opportunities across educational and workforce systems to facilitate the advancement and long-term success of low-skilled workers. National policymakers, community college leaders, and other educators increasingly recognize the value of career pathways in helping underserved individuals access high-quality jobs in skilled, high-demand occupations and industries. Pathways are most successful when they provide multiple entry and exit points, as well as multiple ways to obtain the skills

and credentials needed at any given point within the path. Work-based courses can serve as an entrance point to a career pathway by reconnecting workers to postsecondary education. They also serve as a new format to provide the education and training needed to move individuals along the pathway toward career success.

Who Should Use this Tool: Program administrators, faculty

Spotlight on OCTC: The sample career pathways provided in these tools are adapted from existing career pathways and work-based courses currently offered at OCTC.



TARGETED WORK-BASED COURSES WITHIN A TRADITIONAL DEGREE PROGRAM

OCTC's AAS Degree in Technical Studies consists of several stackable certificates, so that a student can earn recognition for their course completion along the way to a degree. OCTC has combined the three work-based courses most popular with employers, Fluid Power, Electrical Principles, and Maintaining Industrial Equipment I, into an Industrial Maintenance Mechanic Level 1 Certificate that also serves as the foundation for this career pathway.

After earning this work-based certificate, or completing a subset of these foundational courses, students are positioned to pursue their choice of more advanced certificates through traditional courses. Employers may also choose to offer additional select courses in a work-based format as students work toward a degree. OCTC has adapted a wide range of these industrial maintenance technician courses to a work-based format so that they can be combined with traditional courses based on employer interest.

OCTC'S AAS DEGREE

General Occupational Technical Studies		
Industrial Maintenance Technician Diploma		(49-53 credits)
Class Name	Course Number	Credits
General Education and distribution requirements	-	9 Credits
Motor Controls or Rotating Machinery Course	IMT 220/221, EET 270/271, ELT 244, IMT 120/121, or EET 264/265	-
Industrial Maintenance Technology Capstone	IMT 289	1 credit

Plus (from below) - Basic Blueprint Reading; Basic Welding B; Fundamentals or Machine Tools A and B; **Maintaining Industrial Equipment I; Fluid Power; and Electrical Principles**

Industrial Maintenance Technician Diploma (19-21 credits)			Industrial Maintenance Mechanic Level II Certificate (22-26 credits)		
Class Name	Course Number	Credits	Class Name	Course Number	Credits
Basic Blueprint Reading	BRX 120	3 credits	Basic Blueprint Reading	BRX 120	3 credits
Basic Welding B	WLD 152	5 credits	Basic Welding B	WLD 152	5 credits
Fundamentals or Machine Tools A and B	CMM 110/112	7 credits	Fundamentals or Machine Tools A and B	CMM 110/112	7 credits
Plus (from below) - Maintaining Industrial Equipment			Plus (from below) - Fluid Power and Electrical Principles		

Industrial Maintenance Mechanic Level I Certificate		(15 credits)
Class Name	Course Number	Credits
Fluid Power	FPX 100/101	5 Credits
Electrical Principles	IMT 110/111	5 Credits
Maintaining Industrial Equipment I	IMT 150/151	5 Credits

WORK-BASED DEGREE

OCTC has stacked manufacturing work-based courses into a work-based Industrial Maintenance Technology–Advanced Manufacturing Technician Associate’s degree. Students begin taking work-based courses at the beginning of the degree program for 100-level courses and continue to enroll in work-based courses through their 200-level technical requirements. All courses are work-based except for the general education distributional requirements.

This work-based degree is made possible through Greater Owensboro’s chapter of the Kentucky Federation for Advanced Manufacturing Education (GO FAME), in which local employers commit to hiring jobseekers who simultaneously enroll in OCTC. The students work for the manufacturer three days a week and complete the classroom and lab components of their courses two days a week. The employer co-delivers work-based courses for 18 months, and has the option to hire the student as a permanent employee upon graduation .

Associate’s Degree: Advanced Manufacturing Technician (74 Credits)		
		
Semester 5 - Class Name	Course Number	Credits
Industrial Robotics and Robotic Maintenance	IMT 200	4 credits
Practicum Troubleshooting	IMT 198	2 credits
Industrial Maintenance Technical Capstone	IMT 289	1 credit
Maintenance Reliability	IET 1305	1 credit
General Education Courses	-	6 credits
		
Semester 4 - Class Name	Course Number	Credits
Programmable Logic Controllers I	EET 276	2 credits
Programmable Logic Controllers I Lab	EET 277	2 credits
Electrical Motor Controls II	EET 272	2 credits
Electrical Motor Controls II Lab	IEET 273	2 credits
Problem Solving	IET 1304	1 credit
Fundamentals of Machine Tool B with Lab	CMM 112	4 credits
General Education Course	-	3 credits

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Semester 3 - Class Name	Course Number	Credits
Fundamentals of Machine Tool A with Lab	CMM 110	3 credits
Welding for Maintenance	IMT 100	3 credits
Welding for Maintenance Lab	IMT 110	2 credits
Total Production System Management	IET 1303	1 credit
Basic Blueprint Reading	BRX 110	2 credits



Semester 2 - Class Name	Course Number	Credits
Maintaining Industrial Equipment	IMT 150	3 credits
Maintaining Industrial Equipment Lab	IMT 151	2 credits
Electrical Motor Controls I	EET 270	2 credits
Electrical Motor Controls I Lab	EET 271	2 credits
5S	IET 1302	1 credit
General Education Courses	-	6 credits



Semester 1 - Class Name	Course Number	Credits
Industrial Maintenance Electrical Principles	IMT 110	3 credits
Industrial Maintenance Electrical Principles Lab	IMT 111	2 credits
Fluid Power	FPX 100,	3 credits
Fluid Power Lab	FPX 101	2 credits
Safety Culture	IET 1301	1 credit
General Education Courses	-	6 credits

TOOL 1-4: ASSESSING INSTITUTIONAL READINESS

Type of Tool: Institutional assessment

Summary: This tool is designed to gauge institutional readiness for implementing a work-based course model. Readiness measures include employer relations, college leadership and buy-in, curricular and program design flexibility, and financial feasibility.

Why: Work-based courses require a specific set of conditions in order to succeed. This assessment allows colleges to evaluate their current capabilities, identify gaps, and map out additional capacity needs before undertaking full program design work. This tool is designed to aid in that process, and provide a framework for colleges to discuss internally and with their partners ways to achieve optimal conditions.

Who Should Use this Tool: College teams comprised of administration, manufacturing CTE faculty, and employer advisory board members

Spotlight on OCTC: OCTC has been a regional leader in employer engagement, customized training, and workforce education for over a decade. These strengths have been developed largely because of their collegewide appreciation for teamwork and collaboration. Lewis Nall, an faculty member at OCTC credits the institution for his success with work-based courses:

“Having the support of my administration, having the support of my president and my vice presidents and those that are there is imperative to making this work, because it requires me to work extra sometimes. It requires...a lot of trust...that I'm keeping up with the students, and that I'm making sure that they really are getting the education that...they came here for. I have to have their support for the time I'm not in my office.”

OCTC also recognized the opportunity to develop a new approach based on enthusiasm for collaboration at the college and among employers. In the words of Scott Williams, President and CEO of OCTC:

“In my 15 years here, this has been...a time when I've never seen business and industry and higher [education] come closer together and have earnest discussions on how we can help one another and how we can be of benefit.”

ASSESSING INSTITUTIONAL READINESS

Successful implementation of work-based courses requires a particular set of conditions, partnerships, and institutional nimbleness. Planning these conditions and partnerships is essential. In order to get a full picture of readiness and to determine the areas that may need additional capacity before implementation, colleges should undertake a survey of key areas.

Successive tools delve deeper into faculty involvement and assembling your implementation team. This tool takes a broader, institution-wide look at readiness and feasibility. These questions are meant to prompt a conversation for a work-based design, and should not be seen as an exhaustive list of considerations. Rather, use these to take an overall snapshot of institutional considerations and capacity.

Some areas of readiness are essential. Specifically, having strong employer or industry relationships and program design/curricular flexibility. Without these pieces in hand, a work-based course model is not feasible, as it rests completely on these two conditional foundations.

Readiness Measures

Colleges must have full buy-in and support from college leadership.

Work-based course designs require a large degree of institutional flexibility, and support from college leadership can help ensure that implementation will not be met with difficult internal barriers.

Colleges should have strong, mature employer and industry relationships.

As work-based courses are designed to serve the needs of both students and industry, it is essential that colleges have fully developed, secure employer relationships in place. These relationships must go beyond standard advisory committees and must represent a shared vision and goal-setting process. This will allow colleges to determine if employers have potential for strong interest in work-based courses.

Colleges should have institutional flexibility for program and curricular design and delivery.

Work-based courses require that an institution has the flexibility to adapt existing credit-bearing courses for delivery in both a classroom and a work setting. For many colleges, a state or district-wide system has authority over curricular variability, so colleges must determine if and how they can adapt existing courses. For colleges that have greater individual control over programming, it is still important to determine the particular process for curricula and programmatic revision.

Colleges should work to identify funding sources beyond employer or student-worker contributions.

Work-based courses, like any newly implemented program, can have significant startup costs. Colleges should identify early potential funding streams that could contribute to extra staff time, planning costs, as well as augmented instructional considerations.

Colleges should be able to demonstrate strong regional need to invest in skills training for the manufacturing industry.

The work-based course model is a strategy that involves a fair amount of investment from all partners, and requires a strong, steady commitment from area employers. Colleges should determine, through the use of labor market information tools, interviews with local industry, or other intelligence-gathering strategies, that a region can support a stream of trained candidates for both short and long term.

Institutional Measure	Questions	Notes	Readiness Scale		
			Not Present	Emerging	Established
Leadership Support	Is college leadership on board?				
	Is upper administration aware of and signed on for a work-based course program?				
	What factors indicate sufficient support? Explain.				
	Does college leadership participate in planning, outreach, community relations?				
	Are there significant contributions from leadership on committees or workgroups?				
	Identify additional resources or capacity gaps.				

Table continues on next page.

Institutional Measure	Questions	Notes	Readiness Scale		
			Not Present	Emerging	Established
Employer Relations	Is industry engaged and on board for a co-delivered model?				
	Do industry representatives sit on advisory committees?				
	Are industry or company representatives currently involved in curricular design?				
	Is industry involved in placement strategies for students via internships, jobs, etc.?				
	Does your college or department currently develop customized training for employers? Could these relationships be leveraged?				
	Are employers well positioned to support a co-delivered model?				
	Identify additional resources, relationships, or opportunities needed.				

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Institutional Measure	Questions	Notes	Readiness Scale		
			Not Present	Emerging	Established
Program Development Flexibility	How much local institutional variation is allowed for curricular design? Is this sufficient to accommodate a work-based course design?				
	Where is the program going to be principally housed (Continuing Education/ Workforce or Credit departments)?				
	If housed in continuing education or workforce departments, are articulation agreements in place for college credit?				
	Identify additional internal resources could be leveraged to strengthen program design capacity.				
Instructional Flexibility	How comfortable are faculty with new instructional models?				
	Do current faculty have experience delivering on-the-job training, other work-based learning, or apprenticeship models?				
	How connected to industry are current faculty?				
	Identify internal training or professional development opportunities are in place now that could be leveraged.				

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Institutional Measure	Questions	Notes	Readiness Scale		
			Not Present	Emerging	Established
Funding source identification	What funding streams are available for a work-based course model to cover costs such as tuition support, training wages, and on-the-job training delivery? (Potential sources include employers, workforce boards, state training funds, and foundations.)				
	Does the college have robust relationships with local workforce boards or other state training dollars?				
Strong demonstrated need in manufacturing industry	What sources for skills gap or industry training needs have been consulted?				
	Labor market information verification				
	Other employer feedback and input				
	Longer-term projections				

WORK-BASED COURSES: BRINGING COLLEGE TO THE PRODUCTION LINE

This document is part of a toolkit that provides guidance to community college administrators and faculty who are interested in bringing a work-based course model to their college. Tools and resources walk through the major stages of program design and implementation. To access the complete toolkit, go to: <http://www.jff.org/workbasedcourses>

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