

SECTION 2: BUILDING A TEAM AND INSTITUTIONAL

SUPPORT



**EVERYBODY'S GOT TO BE PART OF THIS. IT'S A TEAM.
WITHOUT A TEAM, WE COULDN'T DO THIS.**

—Cindy Fiorella, Owensboro Community and Technical College

Work-based courses present an opportunity for community colleges to build on their ability to connect learning and work. They also present a challenge because they are a departure from a college's usual way of doing business.

Work-based courses require faculty members to trust industry partners to help develop instruction and assessment and asks supervisors to facilitate learning opportunities as part of meeting production demand. The work-based course model is complex and rigorous and requires that everyone assume roles that are likely to be different than their current ones. This means that putting work-based courses in place is not easy and requires a lot of work and commitment from a variety of people across multiple organizations. Section Two helps colleges consider what needs to be in place before scheduling the first meeting to start designing a work-based course. By securing institutional support and building a robust work-based course team, colleges can launch work-based course programs in a way that will not only set them up for initial success, but also respond to any challenges that emerge in later stages of implementation.



BUILDING A ROBUST CORE TEAM

Even the most entrepreneurial and dedicated college administrator or faculty member cannot implement work-based courses in isolation. Multiple stakeholders are involved in developing work-based courses, and it is critical that they all believe in the value of work-based courses and work together as a team. Developing work-based courses requires each stakeholder to broaden their usual way of doing business: Colleges and college systems must approve these courses for their credit standards. Multiple faculty members need to buy into the model, because within a department, different faculty members will be instructors for each work-based course. Manufacturers must not only define their training needs, but also provide course instruction as part of their jobs.

Establishing buy-in and ownership from the administration will pave the way for faculty and employers to promote the new type of course and will also improve the quality of the design and implementation of the work-based courses themselves. As Dean Autry describes initiating his process of introducing work-based courses to OCTC,

the biggest concern was just getting everybody on board, the manufacturer, the faculty at the college. I already had the support of the administration and the support people, so that was okay. But I had to get my faculty involved and also the manufacturers.

Building a core team is an essential first step in early efforts to launch a work-based course program. The team should reflect each of the different stakeholders involved in the model delivery and be designed to take advantage of the institutional assets of a community college, the teaching innovations of faculty members, and the on-the-ground expertise of manufacturers throughout the design process. The college should seek to identify support, such as course-release or faculty stipends, to ensure that team members have time to dedicate to an involved and iterative design process. As Autry points out about his team in starting up this model,

“you’ve got to put the work in, and you have to have dedicated people from the faculty, from the industry, from the workforce development to support staff. Everybody’s got to be a part of this. It’s a team. Without a team, we couldn’t do this. But be understanding. It takes some time. It’s not just something that’s going to happen overnight.”

The core team will serve as both experts and champions for the model. In partnership with the team, program administrators can continue to build support for work-based courses across the college, with additional faculty members and among other regional manufacturers. This team will also identify who needs to be involved in each stage of outreach, course design, and implementation so that partners can contribute where they are the most valuable.

MOVING FORWARD TOGETHER

Community college champions of work-based courses need to be deliberate about how they frame their initial messaging about the model to other work-based course team members and partners. College leadership and faculty, manufacturers, and potential students each use different language, have different goals and needs, and will have a different role in the delivery of work-based courses. At the same time, these partners need to share a consistent definition of the core model so that everyone is on the same page about what they expect a work-based course to look like and how it will be delivered. The team design and delivery that are central to the model require that partners regularly come together and agree on the specifics of each work-based course, including how they will each contribute to its success. In addition, work-based course champions should clearly convey the model’s unique value proposition to each stakeholder.

This section provides tools to guide this stage of institutional preparation, from designing a work-based course team to maximizing broader faculty involvement and recruiting employers for an active implementation role. The section also includes marketing material to effectively communicate and promote the value of work-based courses to each of the stakeholders: faculty, employers, and students.

TOOL 2-1: DESIGNING YOUR WORK-BASED COURSE TEAM

Type of Tool: Worksheet

Summary: This tool is intended to aid colleges in assembling a strong design and implementation team. It provides framing, probing questions, and responsibility overviews to ensure that the work-based course team brings industry experience, employer relationships, upper level administration support, project management, and curricular design.

Why: Work-based courses are a big undertaking for colleges and local industry, and they require all involved to take on new roles and responsibilities. Assembling a strong team at the beginning of the planning process will allow a college to draw on the knowledge and experience of a core group as it shapes its work-based course program.

Who Should Use this Tool: College administrators

Spotlight on OCTC: OCTC's work-based course team consisted of vice presidents, directors of workforce education and manufacturing training, as well as faculty, support staff, and others. The variety of team members allowed OCTC to build a work-based course model that was not only sound but also strongly supported by college leadership. Dean Autry, Associate Dean of Advanced Manufacturing Technology Programs at OCTC, reflects on their experiences developing work-based courses:

“What you need to have for a good team, you need to have a president that supports you; the academic dean or vice president or whoever they are needs to support the program. You also need to have support people. You cannot do this with just faculty. You have to have people who are willing to help you do paperwork. It might be anything from filling out tasks or helping you to work on your task reports for the company or for your college and do all the paperwork for you.”

DESIGNING YOUR WORK-BASED COURSE TEAM

Putting together a strong team is crucial to designing a work-based course program. Further, intentionally planning roles and responsibilities, tasks, and coordination early in the design phase will enable you to appreciate the full scope of the work involved and to determine your institution's capacity to carry out the project.

Work-based courses require institutional staff to expand their current roles, and may even require capacity-building and professional development activities as the program evolves.

Below are some tasks and roles common to work-based course programs. Use these categories to identify either existing staff or partners who can perform these duties, or to plan for new staff development or hiring.

Duties and skills necessary for work-based courses:

- **Industry experience, knowledge, and connections:** Your team should include staff or instructors who have in-depth knowledge of the industry, its needs, and conditions. Often, faculty are themselves transplants from area companies, or had extensive production experience earlier in their careers. Use this knowledge, and potential connections, to help guide the development of programming.
- **Employer relationships and community engagement:** A crucial element of work-based courses is employer relationships. Your team should include those who possess and nurture deep relations with industry and area employers. Wherever possible, leverage employers themselves to sit on planning committees, act as high-level advisors for design efforts, and serve as champions to other employers.
- **Upper level administration support:** College leadership or upper level administration support is vital to a work-based course program. Support from the administration can ensure that your team has a champion both internally at the college and externally in the community. Additionally, leveraging college leadership early in your team development process can strengthen the likelihood that your program will be sustainable amidst shifting institutional priorities.
- **Project management:** Project management, coordination, and oversight are vital at the outset of work-based course implementation. While this need may lessen to some degree as the program becomes more entrenched in the general college, it is essential that some party or parties have the task of organizing, convening partners, and managing staff.
- **Curricular design:** As with any community college course, work-based courses require an instructional design process that upholds the rigorous standards of the college and program. Faculty with instructional design experience, program designers with experience in implementing team teaching, and industry training representatives who can help incorporate employer needs in the curricular design can all strengthen the team's curricular approach.

IDENTIFYING TEAM MEMBERS

Industry Knowledge and Experience	Potential Staff or Partners
<ul style="list-style-type: none"> • Understand manufacturing industry and the work of manufacturing in the area; advise on all project aspects ongoing • Provide experience in supervisory, training, and other industry functions 	<ul style="list-style-type: none"> • Source Example: Technical instructors or other faculty • Name: _____ • Name: _____
Project Management and Coordination	Potential Staff or Partners
<ul style="list-style-type: none"> • Provide overall project coordination and management • Build internal and external partnerships, including employer relationships and work-based course sites, and internal faculty relations • Develop processes for students with institutional departments: financial aid, registrar, admissions • Develop an evaluation plan for tracking student and program outcomes • Develop materials to communicate with internal and external constituents 	<ul style="list-style-type: none"> • Source Example: Deans of CTE, workforce coordinators • Name: _____ • Name: _____
Administration Support	Potential Staff or Partners
<ul style="list-style-type: none"> • Work with registrar, financial aid, admissions to help students navigate the systems • Coordinate facilities and scheduling supervisor/employer collaboration • Track student and program data • Manage paperwork • Schedule meetings, both internally and externally 	<ul style="list-style-type: none"> • Source Example: Administrative assistant, project associate • Name: _____ • Name: _____

Table continues on next page.

Student Services and Coordination	Potential Staff or Partners
<ul style="list-style-type: none"> • Recruit students • Coordinate student intake and assessments, including prior learning and entry requirements • Lead student orientation • Connect students to broader college opportunities, navigate landscape 	<ul style="list-style-type: none"> • Source Example: College navigator, student support counselor, transitions advisor • Name: _____ • Name: _____
Curricular and Program Design	Potential Staff or Partners
<ul style="list-style-type: none"> • Advise faculty and employers through job task analysis and revised course delivery format • Translate existing courses to on-the-job delivery format • Create assessment policies, procedures, and instruments with faculty and employer buy-in • Advise on project throughout 	<ul style="list-style-type: none"> • Source Example: Faculty, industry representative, college instructional design team • Name: _____ • Name: _____
Employer Relations and Community Engagement	Potential Staff or Partners
<ul style="list-style-type: none"> • Coordinate relationships with area employers, industry insiders, and industry associations • Communicate program goals to a wider audience, including press, community leaders, and upper level college administrators 	<ul style="list-style-type: none"> • Source Example: Project coordinators, workforce coordinators, customized training associates • Name: _____ • Name: _____

TOOL 2-2: CULTIVATING FACULTY INVOLVEMENT

Type of Tool: Interview template and worksheet

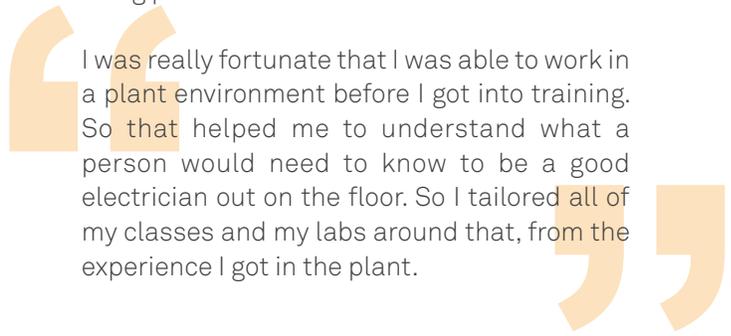
Summary: This tool consists of a set of information-gathering instruments that identify faculty experience, gauge interest and ability, and guide the assembly of faculty teams. These tools are designed to solicit these faculty experiences so that the design of work-based courses is grounded in both instruction and manufacturing contexts.

Why: Work-based courses require strong faculty involvement, and leveraging their knowledge and expertise early can help shape the program and ensure buy-in. Often, faculty members have extensive history working in industry as well as in the classroom, and this combined knowledge is the foundation for work-based courses.

Who Should Use this Tool: Administrators, division heads, or deans

Spotlight on OCTC: Leon Mills, Electrical Maintenance Training Coordinator for Business and Industry, Workforce Solutions, at OCTC, reflects on how his manufacturing experience has informed his teaching practice:

I was really fortunate that I was able to work in a plant environment before I got into training. So that helped me to understand what a person would need to know to be a good electrician out on the floor. So I tailored all of my classes and my labs around that, from the experience I got in the plant.



IDENTIFYING FACULTY EXPERTISE

At the beginning of every new college project or initiative, it is common to assess institutional conditions through an internal and external asset mapping process to determine the strengths and areas of growth needed for project success. What is sometimes deemphasized in this process, however, is a thorough, inward-facing analysis of faculty experience and expertise. For most career and technical education programs, and in Manufacturing and Advanced Manufacturing in particular, leveraging this faculty experience is a crucial component in program success and longevity. When faculty are engaged, consulted, and encouraged to work collaboratively, work-based courses have a greater chance of keeping a foothold in institutional practice.

In order to cultivate involvement, it is important to start by gathering information on the experience and perspectives of faculty. Many faculty bring valuable experience in on-the-job-training, or knowledge of particular company practices. This information will allow a college to identify faculty who could help shape the program, map experience and interest, and form teams to implement designs.

Below are some questions designed to explore faculty interest, knowledge, and experience in work-based learning. These questions can be delivered both individually and in small groups.

Faculty Interview Questions

1. Describe your background in the manufacturing industry prior to joining the college.
2. How does your past experience in the industry influence your teaching style?
3. What roles or tasks did you have in industry that you feel prepared you most for teaching career and technical education?
4. Describe your involvement, either as a student, supervisor, or instructor, in work-based learning opportunities throughout your career (e.g., co-ops, internships, on-the-job training, others). What are some similarities and differences you see up front between some of your past work-based learning experiences and the work-based course program your college is implementing?
5. How do you feel about work-based learning in the manufacturing industry? How do you feel about the college taking on this educational model?
6. What are some initial recommendations you have about designing a work-based course program at your college?
7. In what ways do you feel you could contribute best to the work-based course team? (Outline potential roles, such as conducting a job task analysis with employers, developing or reviewing course materials, or training employer supervisors for their role as instructors.)

MAPPING FACULTY EXPERTISE

Use the following checklist to map out faculty's existing experience in industry roles. These roles (and others you might discover during interviews) signify valuable expertise that you can leverage when designing a work-based course program and assembling faculty teams.

Faculty Name	Work-based learning instructor	Supervisor	Company Trainer	Quality control or improvement	Others?
<i>Cheryl Smith, Mechanical Maintenance</i>	<i>Yes - Apprenticeship Instructor 3 years</i>	<i>Yes - 15 years at Makery Corp</i>	<i>Yes - ran Training Dept for 3 years</i>	<i>No</i>	

CREATING FACULTY TEAMS AND COMMITTEES

Faculty are valuable assets in a work-based course program, and it is important that their knowledge and experience are used to inform the project throughout its existence. However, existing faculty and college staff also have limited capacity for new projects, and so teams or committees should be created to carry out the work of advising and shaping the program development. Creating faculty teams and working groups will allow for maximum faculty input while spreading the responsibility and workload across multiple partners; it will also ensure that the program has buy-in with faculty who are not necessarily engaged in the work-based course instruction.

Below are some team functions. Use these and others that you identify to slot in faculty with valuable information and experience.

Guide to Involvement/Time Commitment:

- Light—sporadic, less than 10 total days
- Moderate—ongoing throughout the project, 5-15 percent of workload
- Heavy—ongoing throughout the project and/or intense periods of activity, at least 25 percent of workload

Program Design and Curricular Planning

- Involvement/Time Commitment: Heavy to Moderate
- Members include faculty who have developed courses, worked as industry trainers, or others with applicable experience
- Types of activities may include planning, curricular revisions and writing, and facilitation of the job task analyses

Work-Based Course Instruction

- Involvement/Time Commitment: Heavy
- Members include faculty who have a proven track record in instruction, collaboration, and industry-verified knowledge
- Types of activities may include instruction in the classroom or coordination and instructional coaching of employer supervisor

Employer/Industry Relations

- Involvement/Time Commitment: Moderate to Light
- Members include recent industry transplants or faculty with particularly recent industry connections, or those who have an active role in the manufacturing community
- Types of activities may include managing external relationships and connecting college personnel with industry and employers

Work-Based Course Evaluation

- Involvement/Time Commitment: Light
- Members can include faculty and institutional research staff with particular knowledge and interest in quality control, human resource history, or management experience
- Types of activities may include determination of evaluation metrics, measures, and methods, occasional support of assessment implementation



TOOL 2-3: PARTNERING WITH EMPLOYERS

Type of Tool: Worksheet

Summary: This tool helps program administrators and industry liaisons at several initial stages of employer partnership. First, it provides considerations to identify promising companies for work-based courses, whether existing college partners or new companies to recruit. Second, it frames several benefits of bringing together employers who offer work-based courses. Third, the tool provides an overview of potential work-based course roles throughout course design and delivery for various staff within a company.

Why: Given their central role in the delivery of work-based courses, employers need to be involved at the very start of program design. Early involvement allows employers to share ownership of the program and best prepare for their later roles. Companies that know who needs to be involved in program design and delivery, and in what capacities, will be better partners throughout work-based course implementation. In addition, securing an employer champion is useful for recruiting other employers for the program.

Who Should Use this Tool: Program lead, industry liaisons

Spotlight on OCTC: OCTC entered the development of its work-based courses with a number of deep employer relationships across the manufacturing industry. The program was launched from its Workforce Solutions division, a community college leader in business services and training that had programs already provided a variety of workplace learning programs for manufacturers, hospitals, and other regional employers. The work-based course champions within the college knew that industry participation was central to the model, so they began their efforts with outreach to regional manufacturers that were existing partners. The college engaged companies to identify their interests and needs that could shape course selection and design when marketing work-based learning.

Securing initial employer champions was the most difficult part of engaging industry, but the track record and trust that OCTC had already built with businesses was extremely valuable in attracting initial manufacturers that would serve as industry champions. Donald Woolridge, Human Resources Manager for Aleris Corporation, echoed the sentiments of several industry executives when he explained that the company already had

an existing relationship with OCTC..., so they have a good understanding of the workforce and what we do.

William Mounts, Vice President of OMICO Plastics, has become an industry leader in OCTC's work-based degree program, noting that,

the relationship has been phenomenal, how they're so open to listening to what we're asking for. And they're willing to not only adapt it to their program, but how quick they do it.

From the college perspective, their existing relationship was only part of what was needed to initiate the conversation about a model for work-based courses that requires serious employer commitment. OCTC faculty member Lewis Nall described getting employers interested in his work-based courses.

Part of that has been a relationship that I have been building for five years. I spend the summers and my Fridays...going to these dealerships and developing relationships with them. ...You've got to have that relationship with that shop foreman, with that supervisor, or with that owner. The second key is they're desperate for techs. They're really desperate for quality-trained technicians. ...So they need me as much as I need them.

The strong regional manufacturing economy, impending retirements, and lack of available talent opened employers up to trying creative educational and training approaches with OCTC. Top administrators of the Workforce Solutions division have leveraged backgrounds in industry to initiate discussions about these pressing talent needs with new employers.

RECRUITING EXISTING EMPLOYER PARTNERS

While it is never easy to sign a company on to a new form of education or training, it is easier to start with those employers that already know and work with the college in some way. The self-assessment results from Tool 1-4 can provide a starting point for thinking about which of your existing employer partners might be most interested in work-based courses. You may also want to focus on employers in subsectors that have the most demand for the graduates of your manufacturing programs.

Who are the manufacturers that have the deepest or most longstanding partnerships with your college?

Among these, have any been actively involved in designing or delivering training rather than relying primarily on the college?

Initiate a conversation among those employers that seem the most open to serving as active partners in program delivery to find out how their interests align with work-based courses. The companies that respond “yes” to some of the questions below could be strong partners for work-based courses.

Company: _____	Yes	No	Explain
Do you have talent gaps that require new training solutions?			
Do you have trouble finding qualified candidates to fill your job openings?			
Do you have an interest in upskilling your entry-level workers to fill your more skilled talent needs?			

Table continues on next page.

Company: _____	Yes	No	Explain
Do you have interest in on-the-job training for new employees that lasts at least several months and prepares them for positions beyond entry level?			
Do you currently have any form of on-the-job training?			
Do you expect supervisors or other senior technicians to help mentor/teach more junior employees as part of their job responsibilities, or are you open to this?			
Does a degree or further education make it easier to advance at your company?			
College or company specific interests (specify) _____ _____			



RECRUITING NEW EMPLOYER PARTNERS

Work-based courses can be a good opportunity to cultivate new employer relationships or to deepen an employer’s role from hands-off input to active engagement. Keep in mind that the appeal of work-based courses will be even stronger to new employers after the college has tested the model and other employers can speak of its value.

Several considerations can help you identify which manufacturers in your broader employer network to approach about work-based courses. Here are questions to answer internally at the community college:

Company: _____	Yes	No	List companies
Do you have employers on advisory boards or otherwise providing input in college program design but not taking advantage of any services?			
Have you been talking to any employers who are interested in working with the college but haven’t found the right opportunity?			
Are there employers that you are specifically interested in building deeper relationships with?			
Have any employers approached you about work-based courses or other forms of work-based learning, such as apprenticeships and internships?			
Other employers (explain why they are included here): _____ _____			

For the employers listed above, particularly those who recur, begin to consider how to approach them:

Do you have connections to these employers to initiate the conversation, such as relationships with members of your advisory committee or other existing partners, faculty members who previously worked at the company, or shared participation on a local project or committee?

For those that approached you, how did they find out about work-based courses?

Based on what you know about each company, how do work-based courses fit in with their in-house training and any training needs they have expressed?

If you are housing the work-based course program in your academic department, do you have a strong relationship with your workforce solutions or customized training division? Describe that relationship:



JOINT EMPLOYER PARTNERSHIPS

Rather than pursuing each company partnership in isolation, colleges can benefit from bringing employers together.

Joint Meetings

Employers can be convened in one-time events such as focus groups, or they can be brought together on an ongoing basis in employer advisory committees to address an evolving set of program questions. Bringing employers together to hear from one another and provide collective input on your program planning can provide value to several early aspects of program definition:

- Identifying skill needs and courses of most value to local industry
- Monitoring emerging needs for future course development
- Exploring which competencies can most commonly be taught in the workplace
- Other: _____

In what ways does your college currently convene employers?

On one hand, these companies are often competitors and can be reluctant to share their workforce challenges and training strategies with one another. On the other, having low-risk ways for employers to solve mutual problems can build some initial trust. The more employers come together and experience value from those interactions, the more likely they will be to provide frank input.

Are your employer partners already willing to share their insights in these groups?

_____ Yes, the current format of our meetings successfully gathers employer input

_____ No, more regular interactions among employers might help build necessary trust

Consortium Cohorts

Colleges that identify multiple manufacturers with similar needs can develop consortium classes comprising workers from more than one company. This is particularly valuable to small and medium-sized companies that are only able to enroll one or two employees in a work-based course at a time. If employers are already partnering through an employer advisory committee or other college activities, they may be more open to this kind of shared course. See Tool 3-5 for additional considerations about consortium cohorts.

Benefits to Manufacturers

Early work-based course employer partners have noted that participating in consortia benefits them as well. By coming together to oversee and deliver work-based courses, they have built an industry network of mutually supportive companies that provide ideas and assistance to one another for a variety of issues beyond work-based courses. Serving in this convening capacity is another way that a college can demonstrate its value to employers and deepen their relationships. See [Becoming a Go-To Convener in the Employer Engagement Toolkit: From Placement to Partners](#) for tips on how to become a valued employer convener.

BUILDING AN EMPLOYER'S TEAM

Just as different members of the college support work-based courses in different ways, after an employer commits to offering work-based courses, different people within the company will need to engage with the college. Clarifying these roles and the value that each employee brings to work-based courses is an important first step in building buy-in across the team. In addition, incorporating each of the perspectives that these team members bring will improve the work-based course design and implementation.

Consider these common roles for your employer team:

Training Director or HR Director

- Often the initial point of contact
- Creates company buy-in and commitment for the program
- Additional roles in your work-based course team:
 - _____
 - _____
 - _____

Content experts, such as a senior technician, supervisor, or training director

- Participate in job task analysis, competency mapping, and work-based course design. Note that team processes like a job task analysis are a simple way to engage multiple content experts in the course design.
- Contribute ideas about which competencies can be taught in the workplace and how that would occur.
- Additional roles in your work-based course team:
 - _____
 - _____
 - _____

Supervisor or peer mentor. This should be an on-site staff member, whether the work-based course student's regular supervisor or someone else with content expertise who is partnered with them.

- Provides regular oversight and instruction to work-based course students throughout the course. Different students may have different mentors, or one mentor might be assigned to multiple students.
- Communicates with college faculty about student progress and concerns, coordinates content delivery, and provides formal student assessments.
- Lead mentor might coordinate multiple content-specific mentors who participate in particular components within the course.
- Additional roles in your work-based course team:
 - _____
 - _____
 - _____

TOOL 2-4: WHAT WORK-BASED COURSES MEAN FOR... COMMUNITY COLLEGES AND FACULTY

Type of Tool: Marketing material

Summary: This sample brochure can be adapted and provided to college leadership and faculty members who are interested in exploring whether work-based courses would enrich their academic program. It provides a basic overview of what work-based courses are and what they look like from the community college perspective. The brochure expands on the role of community college faculty and staff within the team that is responsible for work-based course design and delivery. Finally, it offers potential benefits of work-based courses to a community college. This material should not be provided in isolation, but rather to maximize understanding in support of a conversation about work-based courses.

Why: The first materials that a college leader, faculty member, employer, or student sees about work-based courses will frame their understanding of the model and their expectations for being involved. These materials should provide a consistent understanding of work-based courses to ensure that all partners are working toward the same goal. At the same time, the materials should be tailored to their audience by incorporating the terminology that is meaningful to them, laying out their specific roles, and clearly stating the value proposition for them. Thus, Tools 2-4, 2-5, and 2-6 draw on the same core language but are customized for community colleges, manufacturers, and potential work-based course students.

Who Should Use this Tool: College administrators, faculty members

Spotlight on OCTC: The value of work-based courses to OCTC has been clear. They continue to expand the manufacturing courses offered in this format, and they are looking to expand it to other departments.

Work-based courses have helped OCTC in a variety of ways, including expanding education and training to new students and manufacturers. President Scott Williams describes:

“You will beyond a shadow of a doubt create a tremendous support base, and that is you will get support not only from additional students and parents supporting their children going into this kind of a model, but number two is you will build a stronger business and industry support base.”

Keith Boarman, Technical Training Coordinator for Business and Industry, reiterates this value:

“This project has been a real positive experience for Owensboro Community and Technical College. It truly has. It’s actually probably provided us with some additional business, particularly with companies that haven’t had a training program in the past.”

WHAT ARE WORK-BASED COURSES?

Work-based courses are credit-bearing college courses that are co-designed and co-taught by college faculty and employers to meet academic course learning objectives in a way that maximizes, formalizes, and assesses learning that occurs on the job.



Work-based courses differ from other modes of adult education in that the learner identifies as an employee and the learning is continuous with the job itself, which is structured to achieve learning objectives. These objectives derive from the skill requirements of the job. Work-based courses emphasize work-based learning, with instructional approaches that capture, document, and reward learning that occurs on the job. They support career advancement for employees by providing a flexible model that fits with their lifestyle to earn academic credit, and sometimes industry-recognized credentials.

The delivery of work-based courses involves instructional strategies that strengthen adult learning, employing such techniques as problem-based learning, student portfolios, learning teams, coaching and mentoring, flexible schedules, the use of teachable moments during work, and observation and demonstration. Once students demonstrate mastery of the competencies, they receive academic credit.

What This Looks Like at a Community College

Work-based courses build on hands-on problem-based learning in the classroom and laboratory settings as well as customized training that your college may already provide to local employers.

Faculty may recognize several attributes that together define work-based courses:

- Curriculum, teaching, learning, and assessment embedded in the work process for contextualized, hands-on applications of theory
- Adult-oriented teaching style including self-direction and critical thinking
- Award of academic credit for demonstrated mastery of work activities that reflect specific competencies of course learning objectives
- Classroom, online, or hybrid instruction to supplement workplace learning as needed

Their Value to You

Higher enrollment and revenue; improved student outcomes; professional development for faculty members; opportunities to develop new programs and partnerships and initiate institutional reforms.

It makes me a better teacher, too, because I realize, 'Am I giving him the tools?' If I have that student for 45 lecture hours, contact hours, and 90 for lab time, am I giving that student what he needs? How do we know as instructors if we're doing a good job? Well, the only real proof is: What can your student do when he gets out there and he has to do it.

- Lewis Nall, Program Coordinator for the Automotive and Diesel Program, Owensboro Community and Technical College

JOINT DELIVERY

Faculty, employer supervisors or mentors, and other staff all have responsibilities for designing and delivering some of a work-based course. Together, you determine how learning occurs and what supportive materials work-based course students need. Curriculum is co-designed by educators and employers to ensure that courses meet employer and worker needs, while also meeting rigorous academic standards for degree attainment.

Work-based courses require a strong partnership between the employer and education and training organizations, sometimes joined by labor and community organizations. As partners, you collaborate to determine the competencies needed for a particular occupation, then you structure ways to teach the competencies in a work setting. This may be supplemented by classroom, online, or hybrid instruction.

Your Role

- Educators co-design and teach curriculum with employers
- Faculty members work with employer representatives to determine the work activities that can be used to develop, demonstrate, and document the achievement of course competencies
- Faculty members adapt existing manufacturing courses to a delivery model that maximizes work-based learning: mapping competencies within a course, determining assessment standards, and obtaining institutional approval
- Community colleges provide professional development to increase faculty capacity to educate incumbent workers through these methods tailored to adult learning styles
- Faculty members transform your traditional roles to become learning guides and facilitators as much as teachers



TOOL 2-5: WHAT WORK-BASED COURSES MEAN FOR... MANUFACTURERS AND SUPERVISORS

Type of Tool: Marketing material

Summary: This sample brochure can be adapted and provided to manufacturers who are interested in exploring whether work-based courses would strengthen their workforce training. It provides a basic overview of what work-based courses are and what they look like from the manufacturer's perspective. Company leadership, human resource managers, or training directors will likely be the first audience for outreach about work-based courses, but the materials can also be helpful to supervisors or other employer mentors who become part of a team responsible for work-based course design and delivery. The brochure expands on the roles of various company staff within that team. Finally, it offers potential benefits of work-based courses to a manufacturer. This material should not be provided in isolation, but rather to maximize understanding in support of a conversation about work-based courses.

Why: The first materials that an employer, college leader, faculty member, or student sees about work-based courses will frame their understanding of the model and their expectations for involvement. These materials should provide a consistent understanding of work-based courses to ensure that all partners are working toward the same goal. At the same time, the materials should be tailored to their audience by incorporating the terminology that is meaningful to them, laying out their specific roles, and clearly stating the value proposition for them. Thus, Tools 2-4, 2-5, and 2-6 draw on the same core language but are customized for community colleges, manufacturers, and potential work-based course students.

Who Should Use this Tool: Program administrators, manufacturing executives, human resource managers, training directors, employer supervisors

Spotlight on OCTC: Work-based courses follow on a tradition of work-based learning in the manufacturing industry, with employees learning skills on the job that support a company's specific production process. Cindy Fiorella, Vice President of OCTC's Workforce Solutions, describes the benefits of work-based courses in that manufacturing context as compared with traditional classroom courses.

Reaping the benefits of work-based courses requires a significant investment by manufacturers, including expert time designing the course, supervisor time training workers while in production, and tuition costs. Companies may question whether the time and costs of developing and delivering a work-based course are worth it. As Marty Higdon, Assistant Professor in the Electrical Technology program at OCTC, considers:

“If you don't get work-based learning...then the [work-based course] value-added...doesn't come very quickly. But if you start realizing ...[and a student is] going through motor controls and they're sizing overloads, for example, and if you know that as a supervisor you have a problem with a motor tripping out, all of a sudden you realize what capabilities that student has, and you can start utilizing a student at a higher level. So your...return on investment is going to be much quicker than what it would be if you...weren't involved. So it just makes sense for supervisors to be involved...where they can.”

Several manufacturers involved in the early delivery of work-based courses at OCTC have recognized that “you can't look at everything as a cost from a business aspect. It has to be an investment.”

William Mounts, Vice President of OMICO Plastics, explains that work-based courses are an

“investment up front to be able to train these people...to your standards, your behaviors, instead of somebody coming from a different organization and they either learn to behave the way you want them to, or [you are] constantly retraining them to behave the way you want them to, or you eventually have to terminate them.”

The importance of a company's work culture has been part of the reason work-based courses have been effective for OCTC's employer partners interested in upskilling their current workers as well as hiring workers new to the industry.

WHAT ARE WORK-BASED COURSES?

Work-based courses are credit-bearing college courses that are co-designed and co-taught by college faculty and employers to meet academic course learning objectives in a way that maximizes, formalizes, and assesses learning that occurs on the job.

Work-based courses recognize that the student is an employee first and the learning is continuous with the job itself, which is structured to achieve learning objectives. These objectives derive from the skill requirements of the job. Work-based courses emphasize work-based learning, with instructional approaches that capture, document, and reward learning that occurs on the job. They support career advancement for employees by providing a flexible way to earn academic credit and, sometimes, industry-recognized credentials.

What This Looks Like at a Company

The concept of learning in the workplace is not new: All workers receive informal, on-the-job training. Work-based courses share features with and build on other forms of learning associated with the workplace that you may already provide, including on-site classes, internships, and apprenticeships. The key element of work-based courses is that assignments use actual work tasks and responsibilities to teach both applied and academic skills as part of a discrete college-level course.



Company leadership and supervisors may recognize several attributes that together define work-based courses for a company:

- On-the-job training with a supervisor or experienced mentor to guide student learning
- Assessment process that builds on existing company assessments to verify an employee's qualifications to run production equipment as applicable
- Support from college instructor to identify learning opportunities and align that learning with larger course objectives
- Classroom, online, or hybrid instruction provided by the community college to supplement workplace learning as needed

Their Value to You

Work-based courses are valuable to you. They provide a workforce trained for your needs, reduced costs and higher productivity, higher worker morale and retention, and direct financial benefits.

Since the implementation of these programs, we've seen a marked improvement in terms of retention, ...morale, [and] also just general knowledge and skill. And that is very important in our industry in order to stay competitive. By having these programs in place and by our employees achieving all of those things...it is definitely working out for us in the long run.

- Donald Woolridge, Human Resources Manager, Aleris Corporation

JOINT DELIVERY

Faculty, employer supervisors or mentors, and other staff all have responsibilities for designing and delivering some of a work-based course. Together, you determine how learning occurs and what supportive materials work-based course students need. Curriculum is co-designed by educators and employers to ensure that courses meet employer and worker needs, while also meeting rigorous academic standards for degree attainment.

Work-based courses require a strong partnership between the employer and education and training organizations, sometimes joined by labor and community organizations. As partners, you collaborate to determine the competencies needed for a particular occupation, and then you structure ways to teach the competencies in a work setting. This may be supplemented by classroom, online, or hybrid instruction.

Your Role

- Employer supervisors or other experienced mentors, together with college faculty, identify work-related tasks that have learning potential that aligns with course competencies
- Employers co-design and co-teach curriculum with educators; supervisors or mentors share in instruction, coaching, and assessment
- Supervisors and others at the workplace understand the competencies required for college credit and the requirements for accreditation
- Employers provide broad support to the work-based course student such as flexible scheduling to attend classroom components of courses or access to computers to complete online coursework
- Employers help educators navigate a variety of workplace regulations



TOOL 2-6: WHAT WORK-BASED COURSES MEAN FOR... MANUFACTURING WORKERS AND STUDENTS

Type of Tool: Marketing material

Summary: This sample brochure can be adapted or provided to manufacturing workers or community college students who are interested in exploring whether work-based courses would strengthen their careers and deepen their education. It provides a basic overview of what work-based courses are and what they look like from the student's perspective. The brochure expands on the role of the individual as both a worker and student. Finally, it offers potential benefits of work-based courses to a student. This material should not be provided in isolation, but rather to maximize understanding in support of a conversation about work-based courses.

Why: The first materials that a student, college leader, faculty member, or employer sees about work-based courses will frame their understanding of the model and their expectations for involvement. These materials should provide a consistent understanding of work-based courses to ensure that all partners are working toward the same goal. At the same time, the materials should be tailored to their audience by incorporating the terminology that is meaningful to them, laying out their specific roles, and clearly stating the value proposition for them. Thus, Tools 2-4, 2-5, and 2-6 draw on the same core language but are customized for community colleges, manufacturers, and potential work-based course students.

Who Should Use this Tool: Program administrators, career navigators, prospective students, incumbent workers

Spotlight on OCTC: OCTC's interest in work-based courses ultimately comes back to their interest in positioning their students for success. In its early implementation, most work-based course students have academically outperformed students taking traditional courses, in part because of the connection between the course content and their jobs. OCTC's faculty and students describe these results eloquently. Cindy Fiorella, Vice President of Workforce Solutions, explains the benefits:

“ We consider it a best practice because it offers greater relevance to the student. It offers greater mastery for the student whenever they can see the application in a work setting that they're familiar with.... It makes more sense to them than it does when it's taught strictly in a classroom lab environment because they see the practices.”

Work-based courses also set up incumbent workers for long-term career success beyond what customized training can usually provide. As OCTC faculty member Lewis Nall notes:

“ I don't want to just train my students to work today. I want to train that student so that when he graduates, he understands what's coming, where the technology is going, and that he has a thirst for that. Success breeds success.”

Work-based course students have experienced this value firsthand; including Tyler Ashton, student at OCTC and employee of OMICO Plastics:

“ It's been a great opportunity, and I hope I work at the company I'm sponsored at for a long time. But...if something ever happens I know that [this] education will allow me to find another job or another opportunity somewhere else...[OMICO's] sponsoring me and giving me that opportunity...shows a lot of loyalty to me.”

WHAT ARE WORK-BASED COURSES?

Work-based courses are credit-bearing college courses that are co-designed and co-taught by college faculty and employers to meet academic course learning objectives in a way that maximizes, formalizes, and assesses learning that occurs on the job.

Work-based courses recognize that you are an employee first and that you are learning on the job. They are designed to ensure that the skills you learn in the workplace can be documented, assessed, and rewarded in academic terms. Work-based courses support your career advancement by providing a flexible way to earn academic credit, and, sometimes, industry-recognized credentials.

What This Looks Like to a Work-Based Course Student

Work-based courses share some features with other training you may have received at work, as well as with manufacturing courses you may have taken at college. The defining element of work-based courses is that course assignments use actual work tasks and responsibilities to teach both applied and academic skills.

Work-based courses have several fundamental attributes relevant to your experience:

- Community college credit is earned for demonstrating mastery of your work activities that are part of the course curriculum
- Classroom, lab, or online instruction through the community college adds to what you learn during work
- A supervisor or other senior employee serves as a mentor to guide your learning
- Workplace mentor and college instructor work together to make sure you are learning what you need to succeed in the course and at work

Their Value to You

Work-based courses have tremendous value for you. They provide training to advance your career, college credit toward a manufacturing degree, the ability to earn while you learn, and access to college resources.

The person can also be earning a living while they are going to school. And that oftentimes becomes . . . a speed bump for many students. ‘How do I balance family and life with job and going to school to advance myself in the job or career field?’ This allows them to do that all at once, and I think that provides a little bit of flexibility that we normally don’t think about.

- Scott Williams, President and CEO, OCTC

I personally learn better from hands-on experience, like actually getting my time in, and repetition...At school...you kind of get the general idea of it and ...anybody can look in a book and pass a test, but when you get out here it’s totally different...[My supervisor] has been more than happy to answer [my] questions ... and then sometimes we actually go back to school with questions for the teacher that we get from [work. The supervisor]...lets us try to figure it out ourselves first usually, and if we have questions or we can’t do it he’s always right there.

- Tyler Ashton, student at OCTC and employee of OMICO Plastics



JOINT DELIVERY

Faculty, worksite supervisors or mentors, and other staff all have responsibilities for designing and delivering some of a work-based course. Together, they determine how learning occurs and what supportive materials you need. Curriculum is co-designed by educators and employers to ensure that courses meet employer and worker needs, while also meeting rigorous academic standards to make sure you earn a degree.

Your Role

- You are a worker first. Your job responsibilities may continue in the same department where you already worked, or you may move to new departments to perform new job tasks and learn about different aspects of the company.
- You are also a college student. You may be required to attend class or lab, complete coursework on line, and take quizzes or tests. If you are enrolled in other college courses, a work-based course will fulfill degree requirements just like a traditional, classroom-based version of the same course. It doesn't replace program requirements, but you may be able to take several classes in this format, depending on availability at your college and company.
- You are the link between your work and the college, so you will be expected to support communication between your employer supervisor and your college instructor. Ask your instructor about situations that you experience at work, and bring questions from your homework to your employer supervisor.
- Tuition costs will vary depending on arrangements between you, your college, and your employer. Speak to your company to learn more about any costs you would be responsible for.



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>

This material is based upon work supported by the National Science Foundation under Grant No. 1304249. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.



JOBS FOR THE FUTURE

TEL 617.728.4446 FAX 617.728.4857 info@jff.org

88 Broad Street, 8th Floor, Boston, MA 02110 (HQ)
122 C Street, NW, Suite 650, Washington, DC 20001
505 14th Street, Suite 900, Oakland, CA 94612

WWW.JFF.ORG

