

# Issue BRIEF

## Role of Employers in Strengthening Manufacturing Pathways: Michigan's M-CAM Experience



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### ABOUT THIS PROJECT

*The lessons in this brief are drawn from Social Policy Research Associates' (SPR's) evaluation of the Michigan Coalition for Advanced Manufacturing (M-CAM) TAACCCT grant. M-CAM is a coalition of eight community colleges in Michigan that used grant funds to strengthen four career pathways—Welding/Fabrication, Production, Multi-Skilled/Mechatronics, and CNC Machining.*



### ABOUT THE TAACCCT GRANTS

*The Trade Adjustment Assistance Community College and Career Training (TAACCCT) grants were funded by the U.S. Department of Labor, Employment and Training Administration. TAACCCT funding assists community colleges in expanding and improving training programs that can be completed in two years or less for high-demand, high-skilled occupations.*

*"I think the M-CAM grant has spurred a lot of new activity and efforts by the community college in aligning with employers' needs for advanced manufacturing talent needs."—Employer association representative*

Community colleges are working collaboratively with employers to identify the foundational, technical, and soft skills needed for specific occupations. Community colleges are using information gathered from these employer engagement activities to refine and develop new training programs to address skills gaps, and to create work-based learning opportunities for students. In turn, employers are working closely with community colleges to design and develop college training programs and align them to industry standards, and to shape sector-based training strategies, including customized training and apprenticeships.

This brief draws on data from eight community colleges in Michigan that participated in the Michigan Coalition for Advanced Manufacturing (M-CAM). From 2014 to 2017, the M-CAM colleges greatly expanded their partnerships with advanced manufacturing employers, which contributed to the development and enhancement of their noncredit and for-credit advanced manufacturing training programs and the alignment of those programs to industry-recognized certifications. This brief highlights the employer-level outcomes of the initiative and highlights some employer engagement strategies that helped to support those outcomes.

### WHAT WE LEARNED

- Having dedicated career coaches and job development staff helped the colleges strengthen their relationships with employers and the public workforce system.
- Colleges actively engaged with employers to identify foundational, technical, and soft skills needed for their industries; colleges also identified third-party industry certifications to which they could align their programs and build stackable credential models.
- Strategic partnerships with employers also helped colleges develop robust training programs, such as workforce development, apprenticeship, and customized training opportunities.
- Community colleges must plan for ongoing communication with employers, chambers of commerce, and industry associations in order to sustain their employer engagement efforts.

## Employer Engagement Evidence and Policy Background

Employer engagement has been a core priority within workforce development systems since 1972, when the Comprehensive Employment and Training Act (CETA) required that employers participate in Private Industry Councils (PICs) and inform decisions regarding public workforce service delivery and funding decisions. Each successive wave of workforce development legislation has strengthened the focus on employer engagement by increasing the number of employers participating in advisory boards, encouraging policy and service delivery decisions to be driven by the business community, and prompting public workforce system providers to focus on training programs that lead to employment in demand occupations. Most recently, the Workforce Investment and Opportunity Act (WIOA) has deepened requirements for employer involvement.<sup>i</sup>

1972	1982	1998	2014
CETA focuses on decentralizing control of workforce program decisions from the federal government to states and localities. Creates PICs comprised of employer representatives, but does not give them much control over policy and funding decisions.	The Job Training Partnership Act places stronger emphasis on industry working with states and local areas to create industry-responsive job training programs and requires that employers on PICs have some control over funding and policy.	The Workforce Investment Act legislation recognizes employers as “customers” of the public workforce system and requires majority representation of employers on Workforce Investment Boards. The WIBs set local policy related to service delivery and design.	WIOA emphasizes employer involvement across a wider set of federally funded programs. WIOA requires that strategies be described in state and local plans, measures employer engagement using new performance metrics, sets less restrictive policies related to on-the-job training reimbursements and customized training, and emphasizes sector- and industry-based training programs and development of career pathways.

In general, the body of literature on effective employer engagement strategies at community colleges is very limited.<sup>ii</sup> But promising practices can be gleaned from qualitative and case study research within the workforce development system, including strategies undertaken by community colleges. For example, research showed that sector-based workforce centers in Chicago shaped industry hiring practices and increased entry-level wages among partner firms. These same firms, however, had a tendency to select the most skilled or experienced workers while focusing less on the employment needs of individuals with employment barriers.<sup>iii</sup> There is evidence across multiple studies that sector-based workforce programs offering industry-recognized certifications and student support help participants to achieve higher rates of training completion and certification attainment as well as better employment outcomes.<sup>iv</sup>

Despite federal and state policy requirements and research illustrating its usefulness, meaningful employer engagement has proved challenging to implement, measure, and sustain for many in the public workforce system, including community colleges.<sup>v</sup> There also seems to be a misperception among college administrators about how well their training programs meet business needs. For example, a study conducted by Gallup for *Inside Higher Ed* found that 96 percent of chief academic officers claimed to be “extremely or somewhat confident” that their institutions were preparing students for success in the workforce, but, in a separate study, only 11 percent of employer representatives said they believed that graduates had the skills and competencies needed by their businesses.<sup>vi</sup>

### Employer Engagement under M-CAM

Over the course of the grant, M-CAM colleges reported a 92 percent increase in the number of employer partnerships.<sup>vii</sup> Across the consortium, the number of reported employer partnerships nearly doubled, from 204 to 392. Based on qualitative interviews with college staff and employers, M-CAM colleges engaged with employers in five key areas.

- **Advising.** Colleges consulted with local employers and industry organizations about their hiring needs, required skills and competencies, and industry dynamics that might affect the latter, such as changes in technology and automation. Faculty at Schoolcraft College’s advanced manufacturing program and partner staff at the local AJC center reported that prior to M-CAM, the college’s engagement with business was not well coordinated and

feedback from meetings with employers and industry associations was not well documented or well communicated across college divisions and with local partners. Because of M-CAM, Schoolcraft College staff developed an employer engagement protocol that clearly defined the process for engaging employers and outlined the roles that specific college staff members, faculty members, and outside organizations (i.e., public workforce systems and economic development programs) should play.

- ***Building Educational Capacity through Equipment and Technology Utilization.*** Employers helped the colleges to increase their educational capacity by advising faculty and staff about cutting-edge technologies, donating equipment, and supporting faculty development. For example, Kellogg Community College faculty visited a local employer’s factory and then replicated the manufacturing work environment in the college’s entry-level production training program.
- ***Designing Curricula and Career Pathways.*** Employers helped faculty at the M-CAM colleges to adapt existing advanced manufacturing curricula and assisted in the development of new programs. For example, employers were instrumental in helping colleges understand the value of creating Multi-Skilled/Mechatronics programs, which are essential for employers who have automated their systems and require industrial technicians with electrical, mechanical, and robotics training. Employers offered advice to the colleges on how the content could be contextualized and what credentials—college certificates, degrees, and third-party certifications—were valuable. This is represented best by Lansing Community College’s participation in the Automotive Technical Education Collaborative (AMTEC), a national effort in which auto manufacturers and community colleges collaborate to define competencies, tasks, and skills needed for specific automotive manufacturing jobs and update curricula and labs to reflect these areas. M-CAM colleges also conducted an in-depth employer survey with employers from four manufacturing areas (Production, CNC Machining, Multi-Skilled/Mechatronics, and Welding), which informed the colleges’ curricula and career pathways development.
- ***Offering Students Work-Based Learning Opportunities.*** The colleges worked closely with employers to identify work-based learning opportunities, such as paid internships, guest lecturers, work-site tours, and job shadowing. Schoolcraft College worked with local employers to craft a new welding internship class for students in their associate degree program and created a new pre-apprenticeship welding certification program with input from the local Ironworker’s Union.
- ***Placing Students into Jobs.*** Specialized job development and career coaching staff at the colleges worked closely with employers to screen students for available job opportunities and referred qualified applicants to local employers. Employers valued this level of engagement and stated that it made their hiring process easier because applicants were screened in advance. M-CAM colleges engaged with employers from within their regional catchment areas to participate in mock interviews, speed networking events, and job fairs.

Prior to M-CAM, the colleges had understaffed career services offices that served the student body at large. Under M-CAM, the colleges grew and strengthened their relationships with advanced manufacturing employers by hiring specialized career coaches and job development staff who served as single points of contact for the colleges’ advanced manufacturing programs, linked employers

*I don’t hear manufacturers anymore saying that the colleges are not developing the right type of people, or the curriculum is off or doesn’t line up with the occupation. ... The community colleges have been very responsive, and have listened to employers [and] other talent needs, and have aligned their curriculums and programs to deliver that. ... I believe that the community colleges are far more responsive as a segment of the post-secondary education system.*

- Employer association representative

*Having a point of contact for employers to call made a huge difference in building stronger employer relationships.*

- College job developer

directly with students who had the requisite skill sets, and informed them about ways the college could assist them. Interviews with employers confirmed the value of having a single point of contact within the colleges' advanced manufacturing programs. These specialized career coaching and job placement staff also helped to foster ongoing communication with employers and employer organizations, such as chambers of commerce, economic development programs, and American Job Center staff.

## Implications

- Having dedicated and specialized job developers coordinate services helps cultivate continuous and long-term employer relationships. Specialized staff focus less on one-time, transactional events with employers, rather they focus on helping to generate more meaningful and lasting relationships with employers.
- Coordinating with different types of employer organizations ensures colleges are reaching an array of employers (by industry type, size, and location) and not relying on one source for information.
- Engaging with employers on a wide variety of issues and activities—such as curricula development, student advising, work-based learning opportunities, and employers' short and long-term hiring needs—ensures a mutually beneficial relationship and helps employers to see the value of forming long-lasting partnerships with community colleges. M-CAM is an example of the value of regionally based, sector-specific partnerships between community colleges and employers.

### About This Series

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Other issue briefs in this September 2017 series by Social Policy Research Associates include:

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<sup>i</sup> Burt Barnow and Shayne Spaulding, "Employer Involvement in Workforce Programs: What Do We Know?" in *Transforming U.S. Workforce Development Policies for the 21<sup>st</sup> Century*, edited by Carl Van Horn, Tammy Edwards and Todd Greene (Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, 2015), 231-64.

<sup>ii</sup> Barnow and Spaulding, "Employer Involvement in Workforce Programs," 231-64.

<sup>iii</sup> Greg Schrock, "Reworking Workforce Development: Chicago's Sectoral Workforce Centers," *Economic Development Quarterly* 27, no. 3 (2013): 163-78.

<sup>iv</sup> Richard Hendra, David H. Greenberg, Gayle Hamilton, Ari Oppenheim, Alexandra Pennington, Kelsey Schaberg, and Betsy L. Tessler, "Encouraging Evidence on a Sector-Focused Advancement Strategy: Two-Year Impacts from the WorkAdvance Demonstration," New York City: MDRC, 2016. Hannah Betesh, Hui Kim, Deborah Kogan, Rachel Lindy, and Anne Paprocki, "Evaluation of Accelerated Training for Illinois Manufacturing (ATIM): Impact Study," Oakland, CA: Social Policy Research Associates, 2017. Sheila Maguire, Joshua Freely, Carol Clymer, Maureen Conway, and Deena Schwartz, "Tuning in to Local Labor Markets: Findings from the Sectoral Employment Impact Study," Philadelphia: Public/Private Ventures, 2010.

<sup>v</sup> Kate Dunham, Jeff Salzman, and Vinz Koller, "Business as a Partner and Customer under WIA: A Study of Innovative Practices," Oakland, CA: Social Policy Research Associates, 2004.

<sup>vi</sup> Gallup and Lumina Foundation. "What Americans Need to Know about Higher Education Redesign: The 2013 Lumina Study of the American Public's Opinion on Higher Education and U.S. Business Leaders Poll on Higher Education," 2013, [www.luminafoundation.org/files/resources/2013-gallup-lumina-foundation-report.pdf](http://www.luminafoundation.org/files/resources/2013-gallup-lumina-foundation-report.pdf). Lumina Foundation, "Today's Business Leaders Say, 'It's What You Know, Not Where You Go' When Making Hiring Decisions, New Study Shows." 2014, [www.luminafoundation.org/newsroom/news\\_releases/2014-02-25.html](http://www.luminafoundation.org/newsroom/news_releases/2014-02-25.html).

<sup>vii</sup> A pre- and post-employer partnership network analysis was conducted in Fall 2014 and Spring 2016 using data collected from the eight M-CAM colleges.

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