

OHIO TECHNET

TAACCCT PROGRAM SUMMARY REPORT

This memo summarizes the initiative's accomplishments and challenges and assesses the impact on participants. Ohio TechNet colleges met the intent of the TAACCCT grant, and the consortium continues as a compelling platform for engaging external funders, aligning resources, and expanding partnerships in these efforts.

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THE OHIO CONTEXT

The Ohio Technical Skills Innovation Network (Ohio TechNet or OTN) initiative launched in 2014 in response to the talent needs of an evolving manufacturing industry. The automation era has arrived in Ohio's advanced manufacturing industry, bringing technologies such as robotics, cyber-physical systems, cyber-security, & big data computing into manufacturing processes. These changes create demand for new skillsets, alongside traditional skillsets, among businesses. Ohio's manufacturing industry is more productive and efficient than ever, and the role of skilled workers is vital. Manufacturing is the largest industry by GDP and payroll in Ohio, and the state ranks as the 3rd largest manufacturing state in the nation. The move towards greater efficiency is exemplified by the fact that since 2005, Ohio's manufacturing employment has *decreased* by over 125,000 jobs, or 15% of jobs, while manufacturing output has *increased* by over a third, or nearly \$25B.¹

In Fall 2014, the Ohio TechNet consortium, led by Lorain County Community College (LCCC), was comprised of eleven community colleges in Ohio that partnered to address workforce challenges in advanced manufacturing. The consortium received \$15 million from the USDOL TAACCCT program to invest in the design and delivery of manufacturing education, providing state-of-the-art equipment and student supportive services, and promoting collaboration among member colleges. This memo summarizes the initiative's accomplishments and challenges and assesses the impact on participants.²

BOTTOM LINE UP FRONT: THE PROJECT ACHIEVED THE GRANT'S INTENT

Three strategies guided the activities of the colleges: (1) Create mechanisms for statewide collaboration among colleges and local, state, and national partners; (2) Transform instruction in response to labor market demand; and (3) Expand best practices for student intake, success, and career placement.

Overall, the colleges met the intent of the grant. The grant's outcomes goals and actual performance are listed in Table 1 below.

In a quasi-experimental analysis conducted by researchers at The Ohio State University's Ohio Education Research Center and The New Growth Group, OTN participants outperformed comparison group members in several outcomes:

- Participants had higher rates of completion (+8.2 percentage points) and program retention (+12.2 percentage points) than comparisons.
- Of those enrolled in for-credit programs, participants had higher rates of completing any credit hours (+13.3 percentage points); and similar numbers of credits were completed per term among participants and comparisons.

¹ Ohio Department of Jobs and Family Services, Labor Market Information Service (OhioLMI.com) and Bureau of Economic Analysis (<https://www.bea.gov/data/gdp/gdp-state>) accessed in October 2018.

² Ohio TechNet, Ohio TechNet TAACCCT Grant Final Evaluation Report (<https://ohiotechnet.org/wp-content/uploads/2018/10/Ohio-TechNet-Evaluation-Final-Report.pdf>).

- Participants had higher rates of continuation into further education at a different college (+15.1 percentage points).

This appears to be the result of three factors: (1) increased focus on employer-aligned programs, (2) integration of student-focused delivery models and services, and (3) significant reconfiguration of programs around shorter-term post-secondary and industry-recognized credentials. This is demonstrated in several ways:

- More credentials were earned during the grant period (1.6 for participants vs. 1.3 for comparisons).
- More short-term certificates <1yr (+43.9 percentage points) resulted in the participant group.
- Comparisons were much more focused on 2-year degrees (+40.2 percentage points more than participants).
- More participants earned any credential (+8.2 percentage points).

Participants experienced successful labor market outcomes:

- 73% of all participants became employed or experienced an earnings increase after program completion; 60% of participants unemployed at enrollment became employed within the first year after program completion; 80% of participants employed at enrollment experienced an earnings increase after program completion, compared to earnings three months before enrollment.³
- Overall, participant earnings increased by 39%. (\$24,800/yr on average prior to enrollment and \$34,500 four quarters after program completion); participants unemployed at enrollment experience an average earnings increase from \$9,900/yr in the year prior to enrollment to \$25,000/yr four quarters after program completion; participants that were employed at enrollment experienced an average earnings increase from \$26,800/yr to \$37,400/ yr.
- Unemployed completers had a higher rate of employment in the first quarter after completion and were retained in employment at a higher rate for the first three quarters after completion than unemployed comparisons.

Table 1: Performance Outcomes

Outcome	Goal	Actual
1. Unique Participants Enrolled	1,801	2,248
2. Total Number of Participants Completing a Grant-Funded Program of Study	1,075	1,033
3. Total # of participants still retained in their program of study or other TAACCCT-funded program	559	341
4. Total # of participants completing credit hours	1,360	1,523
5. Total Number of participants Earning Credentials	942	1,040

³ Calculated in a supplemental analysis of participants who enrolled in Winter 2017 or earlier and were therefore eligible for measurement of 1 year employment outcomes.

Outcome	Goal	Actual
6. Total Number of Participants Enrolled in Further Education After TAACCCT-funded Program of Study Completion	246	157
7. Total Number of Participants (Unemployed at Enrollment) Employed After TAACCCT-funded Program of Study Completion	851	107
8. Total Number of Participants (Unemployed at Enrollment) Retained in employment 3 Quarters After Program of Study Completion	740	73 ⁴
9. Total Number of Participants Employed at Enrollment Who Received an Earnings Increase Post-Enrollment	384	1,025

BUILDING ON OHIO TECHNET’S MOMENTUM

Collaboration among colleges and external partners has been a hallmark of this initiative. Ohio TechNet has served as an easy “front door” for state and national organizations to partner with Ohio community colleges and their educational partners. LCCC’s project leadership has been active in cultivating external relationships with partnering organizations resulting in connections to additional resources. These connections have included: (1) leveraging OTN to offer technical assistance to colleges involved in a grant-funded initiative led by the Ohio State Apprenticeship Council to expand apprenticeships in Ohio, (2) a grant-funded initiative supported by Lightweight Innovations for Tomorrow (LIFT) to reach agreement among Ohio community colleges on a “manufacturing foundations” curriculum, and to pilot replication of a non-credit Manufacturing Readiness program, (3) a partnership with the Ohio Department of Higher Education to develop and promote tools for Prior Learning Assessments, (4) a “manufacturing careers image” campaign and statewide manufacturing workforce strategy in partnership with the Ohio Manufacturers Association (OMA), LIFT, and a state agencies committee organized by OMA, and (5), a collaboration with Manufacturing USA institute NextFlex supporting the development of an earn and learn program customized for the innovation economy and serving as the first replication site for a manufacturing recruitment initiative developed by NextFlex called FlexFactor⁵. Additionally, new platforms for collecting participant data, intranet filesharing and internal communications, project management teleconferences and quarterly meetings, technical assistance webinars, and grant compliance management have been established.

By the end of the grant in September 2018, partners had grown to include 26 institutions of higher education, 12 regional sector partnerships representing businesses throughout the state, and seven state agencies. Through the strategic partnership between OTN with OMA and LIFT, Ohio TechNet is a partner at the table as OMA leads a statewide manufacturing strategy which in turn has engaged national leaders from the National Association of Manufacturers (NAM), Manufacturing USA, National Institute of Metalworking Skills (NIMS), the American Welding Society (AWS), and SkillsCommons.

⁴ Minimum estimate.

⁵ NextFlex, FlexFactor® Completes its Second Year (<https://www.nextflex.us/news-events/news/flexfactor-completes-its-second-year/>).

Following the end of the USDOL TAACCCT grant, momentum has been strong. Several priorities have been identified for focused advocacy, fundraising, and new project efforts:

- Expanded employer engagement working in partnership with the OMA.
- Expansion of work-based learning programs.
- Integration of models for accelerated student learning and completion including competency-based education, prior learning assessment, modularization/stackable credentials
- Integration of models for student supportive services such as career navigation.

These priorities align strongly to Ohio's focus on student success and achieving a goal 65% of working-aged adults in Ohio earning a degree, certificate, or other postsecondary credential of value in the workforce by 2025. And, they have helped to guide several recent initiatives including a funded National Science Foundation grant for Columbus State Community College and Lorain County Community College to support the expansion of learn and earn programs both at their institutions, and through Ohio TechNet, supporting other higher education partners to replicate successful models. An investment from the Joyce Foundation supports these goals, and a statewide grant application to the USDOL seeking funds to expand Industry Recognized Apprenticeship Programs was submitted in October 2018 on behalf of Ohio TechNet, the OMA and multiple private and public partners, under the umbrella the Ohio Manufacturing Workforce Partnership, and is awaiting decision.

CONCLUSION

Solving workforce challenges in Ohio's manufacturing industry is an economic development imperative for the state. Ohio TechNet is a compelling platform for engaging external funders, aligning resources, and expanding partnerships in these efforts. The collaborative infrastructure developed through Ohio TechNet represents an opportunity for colleges to continue working together on solutions with institutional, community, and statewide impact aligned with Ohio's economic and workforce priorities.