



Strategies for Transformative Change

OFFICE OF COMMUNITY COLLEGE RESEARCH AND LEADERSHIP

Transformative Change Initiative Overview

The Transformative Change Initiative (TCI) is dedicated to assisting community colleges to scale-up innovations that improve student outcomes and program, organization, and system performance.

Transformative Change Definition

TCI defines transformative change as follows: Raising the individual, organizational, and system performance of community colleges to unprecedented levels without sacrificing their historic commitment to access and equity.

STRENGTHENING CAREER PATHWAYS IN MANUFACTURING EDUCATION

The Illinois Network for Advanced Manufacturing (INAM)

The Illinois Network for Advanced Manufacturing (INAM) consortium is comprised of 21 of the 48 Illinois community colleges led by William Rainey Harper College. INAM works to expand and improve the delivery of education and career training programs leading to industry-recognized certificates or associate degrees for employment in high-wage, high-skill advanced manufacturing occupations: Certified Production Technology (CPT), Metal working/Welding, Mechatronics /Robotics, Precision Machining (CNC), and Industrial Maintenance.

Overview

Three years of partnership planning preceded the award of this grant and served as the foundation of INAM's grant priorities, strategies, and work plans. A key goal was to improve students' ability to enter their local community college's manufacturing programs at the right level based on their experience and educational needs. INAM priorities address students' needs by: creating a practical career pathway; using individualized educational plans; establishing common terminal certificate objectives in innovative manufacturing curricula; purchasing advanced manufacturing equipment; expanding and maintaining employee partnerships; developing job placement services; and establishing articulation agreements between community colleges and four year institutions to streamline further pursuit of advanced degrees.

Major Themes:

1. Use of Student Educational Plans. INAM co-grantee colleges developed and implemented an individualized planning tool for use by advisors and students. After discussions with their INAM "advisor/coach" each student receives a completed Educational Plan which provides a list of courses and the dates specifying when to take them. The plan clearly outlines the program requirements and displays the career pathway to a specific certificate in advanced manufacturing programs. In addition to the Educational Plan, INAM "advisor/coaches" play a more intrusive advising role than traditional college advisors. It is felt this more continuous interaction has contributed to increased student retention in manufacturing programs at all the INAM colleges to over 90%.

2. Agreed Upon Terminal Learning Objectives. Faculty in each of INAM's five advanced manufacturing programs came together and agreed upon terminal learning objectives for the first certificate in each discipline. With this unique agreement, faculty at each college owned the decision-making about their own curriculum, yet all were able to align their courses and curriculum with the common terminal learning objectives. Faculty at each college decided the number of courses in beginning certificates; therefore, not all the certificates require the same number of courses and credits throughout the INAM colleges. However, all can be completed in one year or less. All courses in each certificate are open educational resource (OER) courses and hosted on the INAM website (inam.net) available for any faculty to use and adapt content for their programs.

3. Course Scheduling. Using college program data, many colleges found that course schedules caused unnecessary wait time for students in completing a certificate. This was the impetus for advanced manufacturing faculty to revamp the organization of a program's course scheduling to better facilitate certificate and degree completers. These colleges developed a more concise and quicker sequential order for course offerings which shortened the time to completion. Data collection relevant to each INAM student provided the opportunity for the colleges' INAM "advisor/coach" to do a more focused assessment regarding how many courses remain on a student's individualized Educational Plan.



Illinois Network for Advanced Manufacturing

The Illinois Network for Advanced Manufacturing is available online at <http://inam.net/>.

Major Themes, continued:

4. Outreach to Area Business and Industry Employers. INAM colleges' Advisory Committees have been inspired with renewed energy, and new partnerships have been formed to discuss and determine the required skills needed in manufacturing jobs. Several results of more frequent communications include (a) an improved alignment of curriculum to current job expectations; (b) more businesses hosting student tours and offering internships; and (c) increased donations of needed equipment, training devices, materials and more by area employers. In addition, college faculty have visited area employers and participated in key discussions that have helped shape strategic planning and expansion of advanced manufacturing programs.

5. Articulation Agreements with Universities. A blanket articulation agreement was reached with five Illinois universities for students earning an advanced manufacturing AAS degree from INAM colleges. This allows AAS completers to transfer all their credits in advanced manufacturing to the chosen university, building the career pathway concept for this industry sector in Illinois. Elements of the articulation agreements include the following: (1) the university will accept all the credits of the AAS degree; (2) the university will allow the student to take additional coursework at the local community college (such as a 3 plus 1) and count it toward a bachelor's degree; and (3) the coursework for the bachelor's degree is online, improving access and making attendance more convenient for all students.



INAM Machining students at Daley College

Building a Consortium Culture

Embedded in the INAM consortium culture and established at the beginning of the project is an emphasis on frequent two-way communication, budgetary transparency, and support from the INAM Grant Office at the lead college. A comprehensive database assists the INAM Grant Office to keep apprised of which colleges are on track in meeting outcomes, spending their grant funds, and which need additional assistance. The 21 INAM member colleges are working closely as a consortium to meet the INAM goals, the DOL deliverables, and each college's specific objectives; each college has played a unique role. Consortium leadership believes that they have achieved commitment and sustainability among the INAM colleges. It is anticipated that the INAM colleges will continue to work together, meeting to share ideas and information after the INAM grant is done in 2016.

OUTCOME PROJECTIONS

1. Total Unique Participants Served	2,487
2. Total Number of Participants Completing a TAACCCT-Funded Program of Study	1,292
3. Total Number of Participants Still Retained in Their Program of Study or Other TAACCCT Funded Program	1,132
4. Total Number of Participants Completing Credit Hours	2,054
5. Total Number of Credentials	1,826
6. Total Number of Participants Enrolled in Further Education After TAACCCT-Funded Program of Study Completion	462
7. Total Number of Participants Employed After TAACCCT-Funded Program of Study Completion	1,089
8. Total Number of Participants Retained in Employment After Program of Study Completion	915
9. Total Number of Those Participants Employed at Enrollment Who Received a Wage Increase Post-Enrollment	565

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