



Driven by Employer Demand:
Building a Regional Network to Connect Employers and Education

Proposal Context

In 2014, business and industry leaders of the Great Lakes Bay Region entered into an alliance to improve the economic vitality and quality of life in member counties. Recognizing that the region's economy is STEM focused, a STEM Impact Initiative was among the first priorities of the new Great Lakes Bay Regional Alliance (GLBRA). Recognizing, too, that innovative change such as that contemplated by the GLBRA must begin with a sufficient investment in R&D, the Alliance commissioned foundational research with significant stakeholder participation in May 2014. The resulting report mapped, "a comprehensive strategy for developing Science, Technology, Engineering and Math excellence to build the workforce of tomorrow aligned with the needs of regional employers." Completed in August of 2014, the comprehensive study served as the foundation for the first GLBRA STEM Summit in November of the same year.

The GLBR Alliance has been bold in its quest for regional innovation. Alliance leaders have recognized that in addition to sufficient R&D, meaningful change requires a culture of innovation, an investment in people, and a process for innovation (Cheng, 3M). Following the successful STEM Summit, the Alliance, with the support of its four public higher education partners, tapped into regional culture by creating four STEM Networks.

The STEM Networks have served an important function for the GLBRA by:

- Keeping the GLBRA STEM Initiative alive and vibrant for business, education, health care, and industry leaders. Absent the Network meetings and projects, the STEM Impact report might have languished on the shelf like so many other well-intentioned initiatives.
- Encouraging a leadership mindset that is collaborative and regionally oriented.
- Connecting those engaged in various STEM activities and focusing their attention on the four priorities of GLBRA STEM report.
- Eliciting action project proposals to move from thought leadership to process innovation in building a STEM pipeline for the region.

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Two of the STEM Networks, based at Delta and Mid Michigan Community College (MMCC), have focused their efforts on the key findings related to the first of the four requirements for STEM Impact report. Specifically, the report urges the creation of a

robust STEM talent pipeline driven by employer demand and cites the following key findings related to this goal:

- Economic growth is constrained due to challenges finding qualified STEM talent.
 - Employers struggle to find STEM talent due to a lack of technical skills, soft skills, and required experience.
 - It is difficult to get a clear picture of the region's talent needs because of a lack of transparency around current and future (short-term) demand.
 - Employer job expectations are confusing due to a lack of common language used across industries and between industry and education.
- (STEM Impact Initiative, 2014, p. 6)

Network Success

The GLBRA STEM Networks at Delta and at MMCC have now been operating for two years. The Colleges and the Network leaders have worked diligently on behalf of GLBRA to nurture these new entities. As a result, relationships between Network members have been strengthened and activities have been focused on responding to the GLBRA challenges identified above.

In addition, two significant work products have been produced:

- The Employer Toolkit (https://www.midmich.edu/application/files/1214/7023/2539/Work_Based_Learning_Toolkit.pdf) from the GLBR Network at MMCC, and
- The DACUM analyses in nursing and welding from the GLBR Network at Delta.

The GLBR Alliance may justifiably count as a further success the proposals set forth by each of these Networks. These proposals were evidence that the Network members were prepared to continue their work with GLBR Alliance, infusing STEM innovation into the regional culture. Each Network proposal was employer driven and each responded to the key challenges identified in the STEM Impact report.

Next Steps: An Investment in People and Process

Although the Networks have demonstrated both success and promise for the GLBR Alliance, a lack of clarity regarding direction and support of the Alliance for the Networks threatens to undermine the collaboration. Network leaders at Delta and at MMCC observe signs of a tipping point: Either the Networks can diverge and move focus their energies on local goals and with local support or they can combine their efforts with a regional focus and with regional support. The former strategy would undermine regional innovation but GLBRA must recognize that the Network coalitions are young and fragile and must be supported if they are to be sustained.

Working collaboratively, the STEM Networks at Delta and MMCC jointly propose the creation of a Great Lakes Bay Regional Employer Resource Network (GLBR-ERN) to advance and integrate the progress that has been made thus far. Specifically, the Networks propose:

- The creation of an ERN Regional Advisory Board, initially formed through the unification of the two existing Networks. The regional advisory board will guide and support the efforts of GLBR-ERN. The formation of the ERN Regional Advisory Board will be the first task of the consolidated Networks. Current Network leaders will identify and recruit up to three industry leaders from each of the target employer sectors identified in the 2017 Silverlode report to the GLBRA. These include
 - Manufacturing
 - Information Services
 - Education and Health Services
 - Natural Resources and Mining
 - Financial Activities
 - Trade, Transportation, and Utilities
 - Professional and Business Services
 - Leisure and Hospitality
 - Construction

In addition, the consolidated Networks will identify and recruit the best three liaisons to the K-12 schools and to university partners in the region. The Networks will draft a set of guiding principles and practices for the Advisory Board, including the identification of a core leadership team of not more than six individuals, including the presidents of Delta and Mid Michigan Community College or their designees to work collaboratively with the GLBR-ERN professional leadership team in steering the large Advisory Board

- The identification of two full-time GLBR-ERN leaders who will work in partnership to make measurable progress on the strategies advanced in the GLBR STEM Impact report. Recognizing that the STEM Networks are not authorized agents of any government and lack managerial power, the two GLBR-ERN leaders will each have a managerial home at a community college – one at Delta and one at MMCC.
- Sufficient administrative and technical support for the work of the GLBR ERN.
- A two year commitment to the endeavor from the community colleges and from GLBRA with measurable outcomes, determined by the advisory board, for each year.
- The ERN Regional Advisory Board shall conduct annual evaluations of the ERN's progress with the support of an external evaluator (iEval) and make a report to the GLBRA Board of Directors. A summary report at the end of the second year will include a recommendation that the ERN should be continued, significantly modified, or disbanded.

Great Lakes Bay Regional Employer Resource Network Goals

The Great Lakes Bay Regional Employer Resource Network goals shall align with the key findings, recommendations, and strategies of the STEM Impact Initiation report (2014).

Specifically, the ERN will work across industry and education sector lines to:

- Identify and prioritize the occupations for which skill requirements should be defined, using the DACUM process piloted in the current GLBR-Delta Network.
- Identify, organize, and improve the many ways in which employers are currently communicating skills and competencies needed to the skill providers (schools, colleges, and training centers).
- Create and implement a model for employer-driven experiential learning opportunities to build the talent pipeline. Regional employers show a generous willingness to engage with education to develop the talent pipeline but become frustrated by the diffusion of their efforts and the uncertainty that students are actually gaining knowledge and skills through their efforts.
- Assist and support employers so that they can provide thought-leadership on demand forecasting and skill aggregation strategies.
- Implement useful tools for multi-dimensional communication on regional STEM endeavors, creating greater clarity for employers, prospective employees, parents, and students.