Using data to understand community gaps - Omaha gets partners on the same page to articulate a unified message

In just three years, the Omaha STEM Ecosystem has grown to include 800 partners from K-12 education, business, post-secondary, museums and non-profit organizations working together to connect STEM opportunities for all learners in Omaha.

Ecosystem Lead Julie Sigmon explained that a lot of time and effort went into determining the ecosystem’s strategic priority areas, as well as a common language.

“In the beginning, we convened business and education partners to understand their needs. At first, they didn’t even speak the same language. Now, everyone is able to work together. We started a Math Teaching Circles program with a local university, ‘partnering with business,’ which brings educators and businesses together to show how math is used in real jobs. Our educators have since started taking those experiences in Family STEM nights to link what students are learning in the classroom with a possible career,” Sigmon says.

With a foundation of communication and collaboration across sectors, Omaha STEM is now able to look at different connection points with families throughout the year to share information. For example, if educators are meeting with families at least six times a year, they are equipped with information and business connections that families are seeking and often don’t even know exist.

“Teachers can now tell parents that their child might have interests that would lead them into a career at Gallup or Union Pacific for example. They can even help with arranging visits to local businesses or the with the Omaha Chamber of Commerce’s CareeRockit, to learn more about what it would take to get into those positions,” she said. “But the parents have to sign off on that, and they don’t know these opportunities exist. Aligning our education and business community sets us up in a way to connect with parents in ways we weren’t able to before.”

Equipping educators to support families

Omaha is working to carefully prepare educators to better understand existing careers. Sigmon mentioned that before educators recommend a particular internship or career pathway options they need to fully understand it themselves. Therefore, the relationship and knowledge building collaboration between education and industry has been critical to set educators up for success when speaking with families.

“We have started creating these ‘cheat sheets’ for educators that include questions that they might be asked by families and questions that they might encourage families to ask about the opportunity. The sheets also explain some of the language the business might use to help demystify and decipher potentially confusing language for both educators and families,” Sigmon said.

The ecosystem has prioritized working with early adopters of new things to help test and perfect
the resources and programs. With some successful stories, they acted as a force to encourage further adoption and partnerships, as other partners want to be a part of something successful and don't want to get left behind.’

Omaha STEM Ecosystem is also working on resources to give educators to support them in working with families. Sigmon said presenting these toolkits and other resources to teachers requires finesse as many teachers are overwhelmed and can sometimes feel like you are asking them to do one more thing.

“We are helping them to engage with a critical part of a student’s life – their family. By working with families, you can actually take some of the overwhelming work off their plates and make their jobs easier,” she said. “We don’t do random acts of STEM. So, we spend the time in helping schools understand which business might be useful to bring in (for example, if there is an engineering focus, we help them bring in engineers) based on what they are already doing. We help them connect the dots with the careers and now are working on extending those connections to the families served. By doing this we develop layers within school communities engaged instead of an individual teacher.”

Creating a return on investment for the business community

Similar to other areas, Omaha’s business community receives a large number of requests from all types of education organizations and schools. By aligning their education and the business community in work that is making a difference, ecosystem leaders are able to show new businesses opportunities ways to invest in the ecosystem, instead of operating in isolation. This also is an impact on the return of investment in the future workforce.

“Businesses will ask us – ‘What is different about this?’ – and we can quickly show them how their work with our ecosystem will not only make a difference for Omaha’s students, but also the educators become more prepared to support kids and families are given the information they need to inspire new career pathways for their children,” Sigmon said.

Leveraging the assets in a community

Omaha will also be tapping into the tremendous assets in the community to expand its reach. Working with faith-based organizations and libraries, Omaha STEM is able to reinforce the message. When families and students hear the same message in multiple places, it leads to greater understanding.

This method of multiplying the message increases access for all kids. “By reinforcing things in libraries and churches we are able to reach students that might not have access to activities beyond the classroom,” she said.

“**We are looking out into the community to see who is already doing the work and leverage those resources.**” – Julie Sigmon, Omaha STEM Ecosystem

Omaha STEM Ecosystem has also leveraged a local mentoring program that connects business with the community to ensure that families have access to understanding. The organization has been doing the work for years and has built a great amount of trust and expertise in the space.
Filling the gaps

Omaha STEM Ecosystem send outs three surveys to members throughout the year to understand: 1) how much members know about the ecosystem; 2) what partners want from the ecosystem; and 3) what partners need from the ecosystem. This data enabled the Omaha STEM Ecosystem to create a three-year strategic plan that is successfully coming to an end.

The most recent round of surveys let Omaha’s leadership know that family engagement needed to be the ecosystem’s next priority. The ecosystem is now planning to create a new three year strategic plan with families at the center.

“During our first strategic plan the data let us know that we needed more business involved. We have created committees now that have successfully recruited business and industry, in addition to making sure that all 800 members feel included. Sometimes we will call someone that we haven’t seen in a while and say ‘where have you been? How can we best support you?’” Sigmon said. “Now that we have accomplished some strong relationships with business and the education community we have to use our time together to strengthen our relationships with families.”

Omaha’s use of community surveys has allowed them to build meaningful partnerships that create a foundation for families to best understand and participate in the STEAM learning and career pathway landscape.

Omaha STEM Ecosystem

The Omaha STEM Ecosystem is transforming Omaha into a robust STEM community to grow our talent pipeline by developing key local and national partnerships.

The Omaha STEM Ecosystem seeks to:

- Build capacity through diverse, engaged stakeholders
- Implement a system that ensures high-quality STEM programs
- Provide Professional Development for STEM educators
- Implement a shared framework that evaluates measurable outcomes
- Develop a communication system with increased access to resources and STEM programs.

After three years in operation, the Omaha STEM Ecosystem has over 800 partners from K-12 education, business, post-secondary, museums, and non-profit organizations working together to connect STEM opportunities for all learners in Omaha.

Samples and Presentation Links

Bridging the Gap in the STEM Workforce Presentation (connections between education and industry)

Sample Careers for the Future flyer