

Ecosystem Spotlight: Central OK STEM Alliance (COSTEMA)

Leadership Academy in Oklahoma Helps Teachers Improve STEM Education and Career Readiness

STEM is important in Oklahoma because as it stands now, 1,000 new STEM jobs will remain unfilled each year because too few adults across the state are qualified for the highly specialized science, technology, engineering, and math positions. Students who obtain a STEM education have the ability to earn twice the average salary compared to other starting salaries in the state.

[The Central OK STEM Alliance \(COSTEMA\)](#) is working at all levels to help close the employment gap and meet the demand for STEM jobs. The organization is working with teachers to provide them with STEM industry contacts/mentors so they can relate their lesson plans to real world jobs; they are working to engage students at all grade levels to pique their interest and maintain their focus on STEM education; and finally, COSTEMA is working with industry partners to help them understand the challenges faced within the education system and work to identify solutions that will engage students to pursue a STEM career.

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Leadership through innovation via The Marshmallow Challenge! [#stem](#) [#leadershipacademy](#) [@amfidelity](#) [@DevonEnergy](#) [pic.twitter.com/WShD3FOATf](#)

— Central OK STEM (@CentralOK_STEM) [July 13, 2017](#)

COSTEMA hosted its inaugural STEM Leadership Academy July 11-13, in partnership with American Fidelity Assurance Company. The three-day training, focused on personal leadership development, kicked off a year-long program. Participants, 4th to 8th grade teachers from the region, identified a problem of practice that they'll tackle through the upcoming year. The problem of practice is an issue relating to STEM either in a teacher's grade level, within their building, and/or across their district.

The leadership training was established to empower participants and provide them with the tools and resources to help them identify and work through their problem of practice. It also gave teachers the opportunity to collaborate with their peers from different districts, grade levels, and demographics. The three-day training was different from other professional development for teachers because it focused on the individual teacher as the leader, which is not a concept that is often approached when it comes to teachers. Here are few key takeaways:

1. Leadership is Influence. Classroom teachers have influence through many different avenues - influence over student learning, influence over parent involvement, influence in building culture, and influence within the statewide

education system.

2. Accountability - Not only is the teacher accountable for his or her students' learning, the teacher needs to recognize that the student is also accountable for their work.
3. Various roles within leadership - as a leader and a classroom teacher, you are the facilitator, the emotions manager, the delegator, and the positive influence both inside and outside of your classroom.

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Building STEM pipeline using data from a DiSC survey to leverage Ts as leaders
[#stemecosystem pic.twitter.com/DqC01KKz4](https://twitter.com/DqC01KKz4)

— Central OK STEM (@CentralOK_STEM) [July 11, 2017](#)

Each teacher attending this leadership training received a stipend from COSTEMA partners, including American Fidelity Assurance (AFA), the University of Central Oklahoma, and Devon Energy.

STEM Ecosystems are facilitating improvement in instruction and learning by hosting events like this one, where teachers are empowered and taught through hands-on instruction and support of local business and industry.