



**SHARE YOUR STORY
EQUITY AND ACCESS FOR HIGH QUALITY CAREER PATHWAYS**

Oklahoma State Department of Education New Skills for Youth Academic Affairs and Planning

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<p>Best Practice Summer STEM Educator Externship at Terracon Geotechnical Consulting Externship https://twosteamahead.wordpress.com/</p>
<p>Purpose Provide hands on experience with STEM fields for teachers to see the connections between course content and STEM careers. Program Mission: Our mission is to connect business leaders with teachers to transform the classroom experience, inspiring students to become the next generation of innovators. This program places committed teachers into paid externships in companies in STEM fields so they can experience first-hand what careers might look like for their students. Through their job experiences, these teachers develop the skills and insights to make their teaching come alive in order to inspire their students.</p>
<p>Grade Level(s) Teacher of 6th, 7th, and 8th graders</p>
<p>Expected Results Externships serve as a professional development vehicle for teachers to learn about the industry related to their campus programs. By engaging with and in industry based practices, teachers are better able to craft curriculum that is meaningful and relevant.</p>
<p>Evidence of Success “Every day of my externship I saw the math and science I taught in class being applied to real life situations. Software is often used for calculations, but hand written calculated proof is often</p>

required.”

Check out my blog post

<https://twosteamahead.wordpress.com/>

Training

Summer STEM Teacher Externship – Terracon. “This was an awesome opportunity to see STEM in action at an Oklahoma business. The experience included hands-on work in STEM career Fields. Terracon’s wide range of services offered us a look at lots of different STEM fields – many brand new to us.”

OSDE Support: The OSDE STEM Team is equipped to bring focus to the experience so that it has impact on classroom instructional practices.

STEM Educator Externship Expectations:

Pre-Virtual Meeting – Educators participating in STEM externship are prompted with things to look for that might connect to their STEM classroom.

Weekly Inspection/Reflection Questions – Educators participating in STEM externships will respond to weekly questions that allow for reflection on the experience regarding practical application and inspection of their classroom practice.

Post-Virtual Meeting – All educators participating in STEM externships will be prompted to reflect on connections to their STEM classrooms and ways in which they can share those reflections with a broader audience of educators through blog posts, podcasts or videos.

Staff Needed

Terracon staff for this externship.

Resources Needed

Terracon provided a 2-week paid externship.

“I want to thank Terracon for partnering with the Oklahoma State Department of Education. Their generous offer is the first step to increasing STEM education and career readiness in Oklahoma. I truly hope that other Oklahoma businesses will follow their lead.”

Contact Person(s)

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Oklahoma State Department of Education STEM Team

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Research

Career Exploration – Preparing students for the future workforce is a tremendous responsibility placed upon the classroom teacher. This exploration requires exposing students to the skills expected from industry as a member of a global community. As STEM education becomes a topic of national importance, teachers need to increase the use of authentic learning experiences for students in the classroom. This real-world application is accomplished by giving teachers the tools and resources to continuously develop their own skills and knowledge in STEM methods,

teaching techniques, and relevant use of problem solving processes.

Engineering Design and 21st Century Skills – Teachers need to have experience and understanding of how 21st century skills and the engineering design process are being utilized in the corporate workforce to solve technological challenges. By using teacher externships as a professional development model, teachers gain first-hand knowledge of how companies are using the engineering design process and 21st century skills to be competitive in the workforce. The externship, along with targeted professional development, creates opportunities for improved teaching practices through increased frequency of STEM teaching techniques in the classroom.

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