

What is the Real World Externships for Teachers of Mathematics, Science and Technology?



The Real World Externships program aims to facilitate collaborations between Iowa businesses and industries with science, mathematics and technology teachers.

Real World Externships provides educators with the experience to steer students towards mathematics, science and technology related fields by working side-by-side with knowledgeable and skilled employees at the local business level.

The benefits of this unique school/business alliance, launched in the summer of 2009, include:

- Create lasting partnerships between businesses/industries and local schools.
- Match talented, educated and technology-savvy teachers as participants and contributors to your business needs.
- Give students real-world career information about businesses and industries right here in Iowa, creating a future workforce in the area.
- Gain publicity through the program's promotion of this business/industry partnership with schools, officially recognizing your commitment to education in Iowa.

Tell Me More...

This is NOT your average summer help: As an Extern host, you will have the opportunity to work with some of Iowa's most talented science and mathematics instructors. By opening the door to an Extern, you are opening the door to a partnership that will continue to enhance not only your workplace, but the community at large.



Time commitment:

Externships typically run from June through July with a standard 8:00 – 5:00, 40-hour work week for six weeks. A more flexible work schedule may be negotiated between the host and extern depending on work needs and schedules.

The right teacher for the right job: Program coordinators will work with interested host sites to match qualified teacher applicants in their geographic region based on host needs and teacher skills on a case-by-case basis.

Proven value: Externs have worked on high-level business projects in a variety of industries across the state. From working with a continuous improvement expert in surgical units at a regional hospital, to mussel diving and water quality monitoring, to mapping machine efficiencies at a major advanced-manufacturing business, Externs can offer uncommon expertise and save host sites time and money.



What are Real World Externs doing for Business Hosts over the Summer?



Mike was given the task of gathering and analyzing multiple years of financial data, direct labor costs, indirect labor costs and costs of materials to complete a burden absorption analysis. His completed project provides improved monthly financial planning for Ellison Technologies.
– Mike Brown, 2010 Extern, Ellison Technologies Automation



INSPIRED MOLECULAR SOLUTIONS™

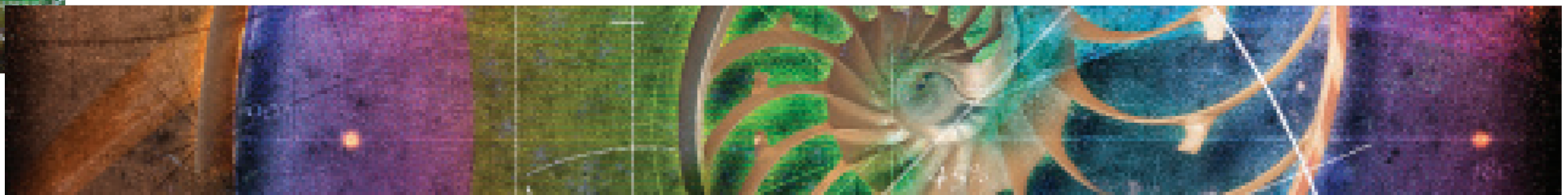
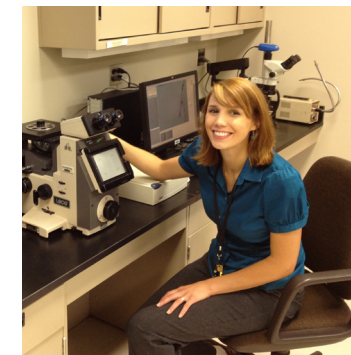


Andrew worked on analyzing gene stability in a transgenic microorganism to determine if particular genes are passed through generations. He was responsible for developing a procedure and provided verifiable quantitative data used to confirm the genetic stability.
– Andrew Bach, 2012 Extern, Kemin



JOHN DEERE

Lynn evaluated the ride control system of a loader and built a model in Simulink that emulated common variables that affect performance. She then wrote code to simulate these changing variables, and the loader was set up with the simulated optimal conditions.
– Lynn Ibarra, 2011 Extern, John Deere Dubuque Works





A sample of partnering businesses and industries include:



What are Externship partners saying about Real World Externships?

"It was an excellent decision...our Extern did a lot of research and created an amazing database that we had wanted to do for several years but had not found the time. Not only did she do this, but she came up with graphs for figuring out some future costs that will help us immensely in marketing our services."
-- Pella Corporation

"All of our externs have seemed to really grab hold of various ways to use their Diamond Vogel experience in their teaching – that is a big reward."
--Diamond Vogel Paints

"[The Externs] bring a fresh set of eyes to our business, and can offer solutions we may not have even considered. They in turn get real life experiences they can take back to the classroom with real life examples that kids can relate to."
-- Hy-Vee Corporation

The Governor's STEM Advisory Council

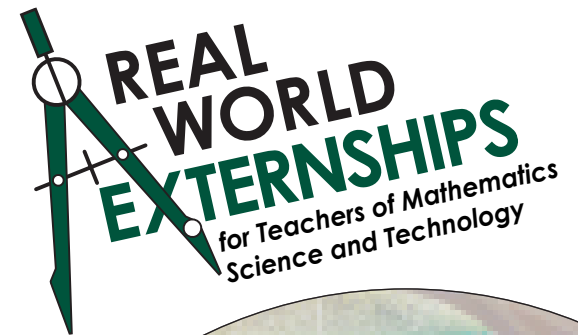
The Governor's STEM Advisory Council was created by Executive Order #74 of Governor Terry Branstad in the summer of 2011. The Council's overarching goal is to boost student interest and achievement in science, technology, engineering and mathematics (STEM) for a strong workforce pipeline in the STEM fields and a STEM-savvy citizenry of wise consumers.



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As a vital business/industry in your community, help your local schools prepare 21st Century citizens, graduates and employees for the worlds of Science, Technology, Engineering & Mathematics.



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dedicated to building a strong STEM education foundation for all Iowans

