



TEACHERS IN INDUSTRY

Partnering with business to prepare the future workforce

Teachers in Industry: Linking Business & Classroom STEM Practices while Retaining STEM Teachers

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College
of
Education



STEM Learning Center

STEM Teacher Retention

- Issue – qualified teachers in every classroom
 - Special Education, Math, Science
 - Many qualified, not enough teaching
 - Half leave the profession in their few years
 - Causes – pay, pressures
 - Rural schools -- isolation

STEM Teaching

- Issue – relationship to the real world
 - Many STEM teachers never worked in STEM
 - Benefits:
 - “Street cred”
 - Relevance of classroom learning
 - Knowledge of STEM careers
 - STEM practices from business/industry

Teachers in Industry

- Created 7 years ago as a partnership between UA College of Education & Tucson-area businesses/industries
 - Originally only in Tucson-area
 - Expansion to Phoenix area
 - Expanding to rural areas of Arizona
- Partners: Southern Arizona Leadership Council; Tucson Values Teachers; UA Colleges of Education, Science & Engineering; UA STEM Learning Center

What is Teachers in Industry?

- Combination of paid summer work experience and coursework to assist in transfer back to the classroom
- Two options:
 - Master's degree
 - Professional development

Master's Degree Option

- Three year program
 - 3 consecutive summers of work
 - Summer courses
 - School-year courses
 - STEM project in the classroom – design, implement, evaluate, present to the community

Professional Development Option

- One to three years
 - Summer work
 - One course focused on transfer to the classroom
 - Many teachers stay in for 3 years; some do 1 year then apply to master's option

How Are We Funded?

- Teachers hired by businesses – earn \$5000-\$12,000/summer
- Operations & part of tuition (65%) covered through grant funding
 - 1st 4 years: Science Foundation Arizona
 - Current (last 3 years): Freeport-McMoRan Copper & Gold Foundation (100Kin10)
 - Current (new): Thomas R. Brown Family Foundation

Results

- Over 90% of teachers still in the classroom
- Businesses: teachers valuable team members
- K-12 students:
 - Increased knowledge of STEM careers
 - Increased intent to pursue STEM careers
 - Saw more 21st skills & business practices in their classrooms
- “Model” STEM program - Change the Equation

Rural Participation

- 8 rural teachers so far
 - Superior, Morenci, Snowflake, Eager, Holbrook, Wilcox
 - Freeport-McMoRan mines, TEP power plants, AZ Electric Co-Operative
- Now working with: Bullhead City, Yuma, Prescott, Page, Flagstaff, San Carlos for summer 2016

Find Out More

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