


The Alamo STEM Workforce Coalition (ASWC) Teacher Externships provide educators real-world examples of the practical use of science, technology, engineering, and mathematics (STEM) in workplace settings, such as manufacturing, health/medical, construction, engineering, and more. Teachers typically tour three host companies, develop a classroom curriculum, and bring back real-world stories and examples to share with students in the classroom.



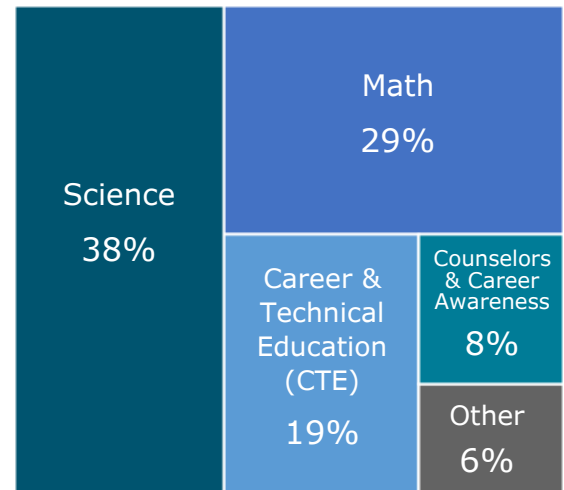

**If students don't know *why* they need to learn something, every lesson is *irrelevant*.**

Many students struggle to connect classroom lessons to future career goals. Teacher Externships were designed to provide teachers with a wide range of experience with business and industry to answer the question "When will I ever use this?"

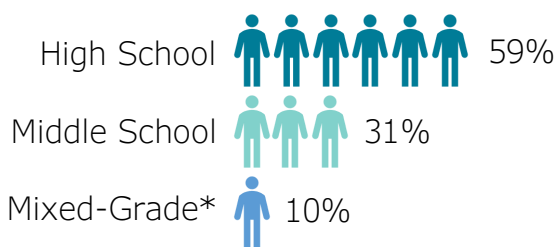
The Teacher Externship project serves educators in a 13-county region, including Bexar and surrounding counties



### Participating Educators by Subject



### Participating Educators by Grade Level 2015-2019



\*Mixed-grade includes intermediate, junior high, & academies

### What we want Teachers & Students to know:



#### Career Awareness

- Local companies
- STEM careers in South Texas



#### Required Knowledge & Skills

- Technical knowledge & skills
- Desired employability skills



#### Education & Career Pathways

- Education requirements
- Opportunities for students



# Teacher Externships

## Project History

17 HS math teachers visit Toyota Manufacturing for a two-day externship



2012

58 HS teachers visit 5 companies in 2 two-day externships hosted by SAMSEC (San Antonio Mathematics & Science Education Coalition)



2013

88 HS teachers visit 20 companies; First grant proposal submitted to Texas Workforce Commission (TWC) by WSA, ATEAM, SAMSEC, ESC-20, UTSA, and UP Partnership (formerly P16Plus)



2014

101 teachers visit 3 sites with 21 companies providing externships; Externships expand to five days; Project-based learning (PBL) introduced



2015

ASWC is formed; ATEAM & SAMSEC merge to form ATEAMS

151 teachers visit 29 companies; Nepris licenses provided to all participating teachers for continuing virtual experiences with industry



2016

SA Works and SA Chamber of Commerce join ASWC;



Teacher Externship project wins Excellence & Innovation awards from the International & Texas Economic Development Councils

194 MS and HS teachers visit 39 companies in six 5-day sessions; Eligibility expanded to include all educators, including STEM, non-STEM, & CTE teachers, plus counselors & administrators



2017



Teacher Externship project wins "Service to Community" award from TWC

166 teachers visit 37 employers in five 5-day sessions; First Cybersecurity specialization offered; ASWC employs a more tailored approach, clustering teachers by domain & matching with industry sectors



2018

ASWC and SA Works raise additional funds to offer parallel externships to 90 additional teachers

180 teachers visit 38 employers; 4-day sessions introduced



2019

ASWC pilots half-day externships for 38 MS teachers

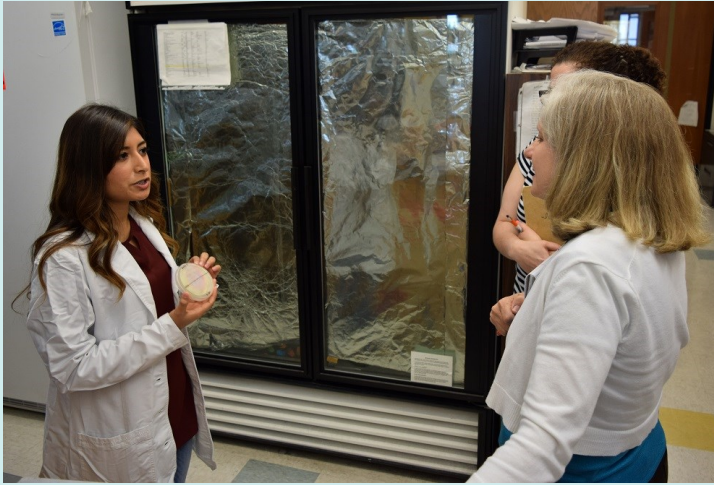
Summer 2020 teacher externships postponed due to COVID-19; ASWC exploring virtual externship options for Fall 2020; Plans to expand the project to Seguin & New Braunfels



2020



The Teacher Externship project is made possible by support from local businesses



ASWC has developed partnerships across in-demand industries, including: manufacturing, energy, healthcare and biomedical, construction, engineering, public utilities, IT and cybersecurity, finance, insurance, and marketing and advertising.



## Industry Partners

### Company/Organization & Years Involved

San Antonio Water System	7
Zachry Group	7
HEB	5
Southwest Research Institute	5
University Health System	5
UTSA Center Excellence in Infection Genomics	5
Cox Manufacturing	5
EO2 Concepts	5
Holt CAT	5
Intertek Automotive Research	5
Toyota Manufacturing Plant	4
GW Plastics	4
Joeris General Contractors	4
San Antonio Food Bank	4
Texas Biomedical Research Institute	3
Ft Sam Houston	3
City of San Antonio	3
Randolph Brooks Federal Credit Union	3
USAA	3
BD (Medical Technology)	3
Booz Allen Hamilton	3
CPS Energy	3
eControls	3
InCube	3
Pape-Dawson Engineering	3
SA Testing Lab	3
UT Health (UTHSCSA)	3
KFW Engineers & Surveying	2
San Antonio River Authority	2
Accenture	2
Anderson Marketing Group	2
Boeing	2
GDC Marketing and Ideation	2
IPSecure	2
Lancer Corporation	2
NuStar Energy	2
Scaleworks	2
TWC Architectural Mouldings	2

“

"It was freaking amazing....I was able to learn more about local businesses and learned more about San Antonio."

“

"The externships were a very big part of the success of this training. As a result of the externships, I feel I can bring 'real world' knowledge that is applicable to my students."



## How Can You Get Involved?

- 1** Host a group of teachers at your workplace
- 2** Give a presentation at a teacher professional development
- 3** Host a virtual tour of your workplace
- 4** Become a project sponsor

## 2019-2020 Teacher Externship Sponsors



## Sponsorship Opportunities

One teacher reaches an average of 120 students per year. Each additional teacher served by the Teacher Externship project acts as an impact multiplier.

**MOMENTUM SPONSOR**  
\$20,000

Create momentum for 20 educators to experience an externship to influence connections to real world application and hands on learning.

**IMPACT**

**2,400 STUDENTS**

**PROPEL SPONSOR**  
\$10,000

Propel 10 educators to experience an externship to influence connections to real world application and hands on learning.

**IMPACT**

**1,200 STUDENTS**

**INSPIRE SPONSOR**  
\$5,000

Inspire 5 educators to experience an externship to influence connections to real world application and hands on learning.

**IMPACT**

**600 STUDENTS**

**ENGAGE SPONSOR**  
\$2,000

Engage 2 educators to experience an externship to influence connections to real world application and hands on learning.

**IMPACT**

**240 STUDENTS**

**INFLUENCE SPONSOR**  
\$1,000

Influence 1 educators to experience an externship to influence connections to real world application and hands on learning.

**IMPACT**

**120 STUDENTS**

Alamo STEM Workforce Coalition is a 501(c)(3).

Your contribution is tax deductible.



The Alamo STEM Workforce Coalition (ASWC) was formed in 2015 to extend and enhance the work being done to engage teachers with employers in learning how math and science were being applied in the real world.

ASWC is a group of educators and workforce professionals who collaborate to provide rich externships and professional development to educators in Bexar and surrounding counties.

