Externships for Teachers

Program Overview

Goal Statement
Provide high-quality STEM professional development experiences through externships that fuel and inform educators as they guide students. These externships will be characterized by three things:

- Teachers working side-by-side with local businesses and organizations
- Externship business partners committed to STEM education in the Tulsa area
- Externships characterized by projects that are meaningful to the employer and the educator - resulting in educators heading back to the classroom ready to inspire students to pursue STEM careers in the Tulsa area.

Role of the Business Host
- Provide a six week hands-on, minds-on experience by which teacher externs contribute to company operations by applying mathematics, engineering, science and technology skills.
- Support extern in documenting his/her experience and reflections in a presentation.
- Explore avenues of extending the extern/employer relationship beyond the externship through school activities, classroom visits, supply drives as available.
- Pay the teacher’s compensation of $5000 for the 6-week externship.

Role of the Extern
- Apply talents, knowledge and skills to employer operations throughout the 6 week externship.
- Produce a presentation describing the Externship experience.
- Develop a finished product through the Externship experience that meets the needs, and expectations of the host company and translates to a rich classroom activity for the extern’s students.
1. Definition of an Externship
An Externship is similar to a traditional internship but with some distinct differences. The Externship host (i.e., business or organization), can expect a skilled, productive, independent professional with the ability to solve problems from the start of the experience. Extern applicants will provide a resume and cover letter for review by the extern host and participate in interviews as invited by potential extern hosts. The Externship can take many forms. Our most successful experiences have occurred when the extern has one or more focused projects that utilize skills and contribute to the operations of the business. We have also found that it is important the extern has the opportunity to interact with other professionals along the way, fostering a sense of teamwork and collaboration between the teacher and host employees.

2. Participants and Benefits
Any Tulsa-area teacher is eligible to apply. Externs earn a stipend of $5000 as well as an experience that utilizes the latest real-world applications specific to each extern’s discipline.
Extern hosts receive a unique opportunity to work with some of the region’s most talented science, mathematics, engineering and technology instructors who can offer uncommon expertise and save host sites time and money. In turn, Externships provide a launch-point for lasting business-school partnerships that enhance classrooms, the workplace and the community at-large.

3. Program Goals
The goals of the Externship program include:

- As a result of the Externship experience, teachers will gain a sense of content skills, employability skills and technological literacy their students need to become future members of Oklahoma's workforce.
• Students in the Tulsa area will get a first-person account of how their studies in science, mathematics, engineering and technology education ultimately have real-world application. Relevancy opens windows to the future and allows students to begin to imagine how their academic skills can eventually transition to a career in the state of Oklahoma.

• Externships pave the way for further collaboration between the host, teacher and the school district. This experience removes barriers between teachers, schools, and corporations and encourages collaboration and lasting partnerships between the educational and business partners.
Tulsa Regional STEM Alliance
Externship Program
Timeline

- October - February: TRSA recruit Externship hosts
- February - March: Extern hosts review potential externship work experiences
- February - April: TRSA collects educator applications, resumes and cover letters
- April - May: TRSA shares application packets with potential externship hosts.
- May: Extern hosts interview potential externs and make externship offers
- June - July: Externs work at host sites for six weeks
- September: Externs and Hosts present experiences at TRSA September Advisory Council meeting
4. Timelines
Tulsa Regional STEM Alliance generally makes inquiries to possible business hosts in late winter with a goal of having extern hosts recruited by the end of February. The next role for an extern host is to identify and define as closely as possible an Externship experience for the summer. The host may either identify several possible projects that can be matched to a broader population of teachers and skill sets or identify a single project with a more particular type of teacher and skill set in mind. The goal for a general Externship project description to be completed is March 1. At that time, the Tulsa Regional STEM Alliance and area STEM coordinators will promote the externship program to teachers who may have the inclination and skills to participate at the host site. All possible teachers must complete an application if interested in participating in the Externship experience. Ultimately, we would like all of our business partners to build an Externship opportunity into their yearly summer plans, which allows these timelines to be maintained in a consistent manner.

When the deadline for applications arrives, resumes and cover letters of all applicants are forwarded to hosts by the Tulsa Regional STEM Alliance. Communication and interviews are arranged at the discretion of the hosts and applicants. The Tulsa Regional STEM Alliance will have a pre-Externship meeting for all externs at the beginning of June to clearly spell out the expectations for the Externship. Externships typically start in mid-June and are run for six weeks. The Externship experience will culminate with a post-Externship forum during the September TRSA Advisory Council meeting, which is a chance for teachers to share their experiences and the impact it will have on their classroom, and for hosts to share how their extern contributed to company operations.

5. Extern Compensation and Host Contributions
Externs are expected to be compensated at a rate of $166.67 per day, and while seven and a half-hour days are preferred, some flexibility may be granted by the host on a case-by-case basis. It should be noted that externs are considered employees and stipends are paid directly to the extern by the host company.

Host commitments will preferably be established by April 1. Establishment of partnership will be confirmed with a Letter of Intent (see Appendix B).
6. Legal Waiver and Proprietary Information Protection
A legal waiver must be signed by the extern before beginning the Externship experience (see Appendix B). This document releases the extern host and the Tulsa Regional STEM Alliance from any and all liability. Hosts also may require the extern sign an organization-specific release and waiver of liability form and/or proprietary information release form. Alternatively, hosts can bring the extern into the organization as a contractor or employee as a means of legal and proprietary information protection.

7. Teacher Application and Expectations
The teacher application will become available through the Tulsa Regional STEM Alliance website by March 15. The teacher application asks for information such as educational background, content area, specific interests and applicable skills (see Appendix B). While the Externship program coordinators will do everything possible to secure an experience for the qualified teachers who apply and extern hosts who offer experiences, no guarantee is made.

Once a potential teacher-host match is identified, a pre-Externship meeting will occur with the teacher and host. This meeting may function as an interview of possible externs from a pool of applicants to determine the best fit for the experience. More commonly this meeting is an opportunity to define the Externship experience, negotiate a possible start date of the Externship, discuss expectations and content, and identify the main host point-of-contact. At the end of this meeting if both teacher and host are satisfied with the proposed experience, both sign a Commitment Form confirming commitment for the summer (see Appendix B).

Either at this initial meeting or when the Externship begins, it is important for the teacher to be clear regarding the exact schedule he or she can work in the summer, including any vacations or commitments that require multiple days away from the Externship.
Teacher Expectations
A. A minimum of 30 days at the Externship site with documentation of hours worked.
B. Create a presentation about your externship experience.
C. Develop a project based learning lesson plan related to your externship experience for the class you currently teach.
D. Teach the lesson you developed as part of the Externship during the Fall semester and invite your Extern host to assist/observe during some portion of the lesson.

If a teacher would like to participate in an Externship the following year, he or she must recognize that new applicants receive first placement priority in order for the program to impact as many teachers and learners as possible.

8. Role of the Extern Host
The Externship host is responsible for developing a six week experience for the teacher extern. If desired, Tulsa Regional STEM Alliance staff are happy to assist with shaping an experience to best suit a teacher extern. To achieve the program goals, the experience should be more than a job shadow and include meaningful contributions to company operations.

While business feedback consistently praises the autonomy and productivity of teacher externs, hosts are encouraged to routinely check in on and guide externs, much as a business professional would enjoy guidance if placed into a school environment.

Externships are a launch point for permanent business-school partnerships. Businesses may assist teachers through the academic year via speaking engagements, tours, resources, potential internships and jobs for students, co-teaching and other possibilities.

If a business host would like to host the same extern again for a second summer, we ask that the business host a new extern as well. Alternatively, hosts in the past have hired former externs as summer employees while also hosting a new extern.
9. **In the Event of a Mis-Match**
We expect that mismatches will be extremely rare. If it is determined that the Externship cannot be continued, the teacher will be compensated for the days he/she completed at the Externship. It is our hope that the reason for the termination of the Externship is very clear and both parties will consider another experience the following summer.

10. **Concluding the Externship**
Typically, Externships are concluded at the end of July. The September Advisory Council meeting is an occasion for both externs and business hosts to share their experiences and the impact it will have on the educator’s classroom and for hosts to share how their extern contributed to company operations. Additionally, the Advisory Council meeting allows both externs and hosts to discuss how to better the program and ensure its sustainability. Exploring ways of continuing the partnerships is also encouraged.

11. **Media Coverage and Promotion**
Externships will be promoted locally through various media outlets. Businesses have the option to review any pictures and information that may be made public, but we ask that review be done in a timely manner. The local promotion of the Externships provides positive and beneficial media coverage for both the businesses and the program, and we ask that hosts be willing to provide quotes and logos to help with promotion.
APPENDIX A
Sample Externship Descriptions

● Creating engaging activity kits for STEM professionals to use in engaging students on school visits designed to explore various STEM careers
● Lead and serve as a liaison for interns in corporate settings
● Facilitate corporate training sessions through application of pedagogical knowledge
● Create digital presentations designed to inform students about career opportunities at Host site
● Design and lead in house student visits like shadowing days or take your child to work days
  ● Act as an ambassador to school sites for Host
● Shadow various professions within Host organization and prepare a presentation to help students better understand array of STEM opportunities available to them
We are thankful for your partnership in the Summer 2020 Externship Program. For teachers, experience in the workplace leads to more meaningful lessons, career awareness and increased interest for their students and deepened understanding of their own science, engineering, mathematics and technology fields.

For business, industry and agency hosts, a teacher on site leads to increased productivity in operations, a strengthened talent pipeline and an impact on the quality of education locally.

The sustainability of this program depends on investments by our partners. Please check the box(es) below describing your level of commitment for summer 2020:

☐ My company commits to host ________ (#) Teacher Externs in the summer 2020.
☐ My company commits to paying a stipend of $5,000 to each teacher Extern.

Submission of this form indicates the commitment of < COMPANY NAME > to the 2020 Tulsa Regional STEM Alliance Externship program. If summer plans change, please contact the program coordinators immediately.

Extern Host Company Contact: _____________________________
Contact Position/Title: _____________________________
Extern Host Company: _____________________________
WAIVER AND RELEASE

In consideration for being allowed to participate in Externship Program (hereinafter, “Externship”), I, <EXTERN NAME> (Teacher-Extern), by signing my name below, acting for myself, my heirs, personal representatives, and assigns, do hereby agree to indemnify, release, waive, hold harmless, forever discharge, and defend <HOST NAME> (business/industry partner), the Tulsa Regional STEM Alliance, and their employees, agents and representatives (hereinafter, “Releasees”) from any and all liability of any and every nature whatsoever, including claims or suits at law or in equity that I may have, for any and all personal injury, including death, and property loss or damage, which may result from my participation in the Externship, including travel, whether injury and/or damage is caused by my negligence, the negligence of any of the Releases, or the negligence of any third party. I am participating in the Externship on a voluntary basis. I fully recognize and understand the potential dangers associated with the Externship. I understand and agree that any personal injury, including death, and/or property damage sustained by me relating to my participation in the Externship shall be my responsibility.

In signing this Waiver and Release, I acknowledge and represent that I have read the foregoing, understand it, sign it voluntarily as my own free act and deed, am at least eighteen (18) years of age and fully competent, and agree to be legally bound by it.

Read carefully: This document affects rights you may have if you are injured or otherwise suffer damage while participating in the Externship. You may not begin the Externship until this signed document is complete.

Teacher Extern Signature Date: ______________________________

The Externship Program is coordinated by the
Tulsa Regional STEM Alliance
907 S. Detroit Ave, Suite 600
Tulsa, OK 74120
info@tulsastem.org
918-779-4910, ext 201
Tulsa Regional STEM Alliance
Externship Program
Understanding of Commitment

EXTERNSHIP HOST RESPONSIBILITIES

1. Build a six week hands-on, minds-on experience by which teacher externs contribute to company operations by applying mathematics, engineering, science and/or technology skills consistent with the Oklahoma teaching standards.
2. Enable extern to devote time to documenting his/her experience. Externship hosts will permit the sharing of these reflections in full or in part, while externs must be mindful of proprietary information when composing reflections. **Please indicate the allowable audience of the extern reflections:**
   - Accessible only to project evaluators
   - Accessible publicly after business review and approval
3. Externship hosts are asked to participate in surveys and the year-end Advisory Council meeting for program evaluation and reflection.
4. Please identify at least one main point of contact at the Externship host site for the duration of the experience:

<table>
<thead>
<tr>
<th>Primary Contact Name:</th>
<th>Position:</th>
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<tr>
<td>Email:</td>
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<table>
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<th>Secondary Contact Name:</th>
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UNDERSTANDING of COMMITMENT TEACHER EXTERN RESPONSIBILITIES

1. Teachers will attend a pre-Externship orientation. At this orientation teachers will participate in a pre-survey and review expectations for the Externship. Compensation is provided for this meeting.

2. Upon starting the Externship in June the extern and host will work together to build the hands-on, minds-on experience during which the extern will contribute to company operations by applying math, engineering, science and technology skills. The Externship spans six weeks (30 days.) Compensation of the Extern by the host company is at a rate of $166.67 per day. Note: taxes are not taken out of your compensation in this program; it is the teacher’s responsibility to address this issue.

3. If requested by the host a non-disclosure agreement shall be established between host and teacher extern. Teachers must be conscientious of the proprietary information shared, while keeping in mind that reflection of the experience is essential for program evaluation.

4. Teachers will create a project-based learning lesson plan based on their Externship experiences and teach it to students in the Fall semester after their externship.

5. At the end of the experience the extern will create a presentation describing the Externship and reflect on how this experience will change their classrooms.

6. Teachers will attend a year-end forum at the September Advisory Council meeting of the Tulsa Regional STEM Alliance for the opportunity to share summer experiences and the effect it will have on their classrooms. Compensation is provided for this meeting.

7. Teachers will be asked to complete and submit pre/post surveys to monitor program quality and effectiveness.

Teacher Extern:

__________________________________________  ______________  __________________________________
Signature                                          Print Name                                     Date

Tulsa Regional STEM Alliance: ___________________________

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Tulsa Regional STEM Alliance
Externships Program

NAME: ______________________________________
(Last First M.I.)
Male Female Date of birth :__________

HOME
Street address __________________________________________
City/State ______________________________________ Zip code ____________

SCHOOL
Name _________________________________________________
Street address___________________________________________
City/State_______________________________________ Zip code ____________

PHONE
Home ___________________Cellular ____________________School _______________

EMAIL 1 ______________________________
EMAIL 2 ______________________________

PERSONAL INFORMATION
How did you learn about the Externships Program?

The Externship Program is coordinated by the
Tulsa Regional STEM Alliance
907 S. Detroit Ave, Suite 600
Tulsa, OK 74120
info@tulsastem.org
918-779-4910, ext 201
Tulsa Regional STEM Alliance
Externships Program
Application

(Please type and submit electronically)

1. Education/Degrees:
2. Employment/Teaching Background:
3. Current course(s) and grade level(s) taught:
4. Previous course(s) and grade level(s) taught:
5. List any professional development, awards, research or other information you would like us to consider.
6. Please indicate specific interest within your field that may be applicable to the Externship experience, or list others below.
   • Life Science
   • Physical Science
   • Earth Science
   • Math
   • Engineering/Technology
   • Biotechnology
   • Biochemistry
   • Astronomy
   • Algebra
   • Virtual Programming
   • Anatomy/Physiology
   • Inorganic Chemistry
   • Geology
   • Geometry
   • Materials Science
   • Zoology
   • Organic Chemistry
   • Climatology
   • Calculus
● Design/Modeling
● Botany
● Electronics
● Biogeography
● Statistics
● Process Optimization
● Field Biology
● Optics
● Accounting
● Machining
● Environmental Science
● Training
● Marketing
● Robotics
● CAD Drafting
● Cell Biology
● Newtonian Physics
● Econometrics
● Nanotechnology
● Genetics
● Thermodynamics
● Computer
● Science
● Leading students in exploratory project based learning
● Creating progressions of engaging learning experiences for students
● Helping students understand complex ideas in age appropriate ways
● Setting students up for success through solid foundational understanding of math and science
● Other:
EDUCATION AND EMPLOYMENT BACKGROUND INFORMATION

EXTERNSHIP EXPERIENCE

1. List any applicable math, science, technology, vocational skills or experiences (lab research, outdoor field research, computer programming skills, mechanical and/or engineering experience, etc).

2. Computer skills: rank your proficiency in the following programs or skills:
   1 = no experience, 3 = proficient, 5 = advanced experience:
   ___ Word Processing ___ Blogging ___ Excel Spreadsheets ___ Social Networking ___ PowerPoint ___ Skype ___ Computer Programming ___ Online Surveys ___ Databases ___ Online Video Sharing

*Please note that teacher externs are required to maintain email communication at all times during the summer.

3. Rank your desired work environment from 1 - 4, 1 being most desired, 4 least desired:
   ___ Office ___ Laboratory ___ Manufacturing ___ Outdoor

4. Why are you interested in participating in this Externship program and what are your expectations of an Externship if you are selected to participate? (limit 200 words)
6. If offered a Teacher Externship, how do you foresee using knowledge gained at an Externship in a classroom setting? (limit 200 words)

I hereby certify that all information provided on this application is true and complete to the best of my knowledge. If accepted, I understand that providing false information is grounds for dismissal from the program.

**Applicant Name**_________________________________________

**Date** ________________
REFERENCES

1. NAME __________________________________________
   (Last First M.I.) Title ________________________________________
   WORK
   Street address_____________________________________________
   City/ State______________________________ Zip code _____________
   Home phone _______________________________
   EMAIL _____________________________

2. NAME __________________________________________
   (Last First M.I.) Title ________________________________________
   WORK
   Street address_____________________________________________
   City/ State______________________________ Zip code _____________
   Home phone _______________________________
   EMAIL _____________________________

3. NAME __________________________________________
   (Last First M.I.) Title ________________________________________
   WORK
   Street address_____________________________________________
   City/ State______________________________ Zip code _____________
   Home phone _______________________________
   EMAIL _____________________________
ATTRIBUTION

The substance of this handbook was borrowed heavily by an incredible document created by Julie Hasfjord and Perri Applegate at Tulsa Public Schools in preparation for the first iteration of the Externships Program which was called Tulsa Externships for Teachers (TEFT). We are grateful for their vision and hard work which have borne fruit in the expansion of these externship opportunities for many more teachers.