

Outreach Committee Project Proposal

Applicant	Kaitlin Maguire
Applicant ID	APP-000265
Company Name	Idaho STEM Action Center
Recipient Address	Idaho STEM Action Center 802 W. Bannock Street, Suite 900 Boise, Idaho 83702
Email	istem@stem.idaho.gov
Funding Requested	\$0.00
Status	Submitted
Funded	<input type="checkbox"/>

Contact

Question: Entity name

Idaho STEM Action Center

Question: "Doing business as" (If applicable)

Idaho STEM Action Center

Question: Federal Tax ID Number

826000952

Question: Street address

802 W. Bannock Street, Suite 900

Question: PO Box (If applicable)

Not Answered

Question: City

Boise

Question: State

Id

Question: Zip Code

83702

Question: Entity website

stem.idaho.gov

Question: Last name

Maguire

Question: First name

Kaitlin

Question: Email address

istem@stem.idaho.gov

Question: Contact phone

208-332-1720

Project Information

Question: Project title

Externship Program 2020

Question: Project manager first name

John

Question: Project manager last name

McFarlane

Project Description

Question: Project description

Externships are a transformative experience for educators and students that can change classroom dynamics and show students potential local career opportunities. Through externships, educators spend time in a workplace to learn through experience about trends, skill requirements and opportunities in industries. In 2019, Idaho STEM Action Center (STEM AC) and Workforce Development Council (WDC) placed 16 K-12 public Idaho educators in externships with local organizations for five weeks during the summer. Educators will return to their classrooms in the fall with new ways to connect classroom content with students' future career interests and will be able to help students develop the needed skills to prepare for being part of Idaho's workforce. The cost of this program is the stipends externs receive for their work and time. As 2019 was the pilot year for this program, the cost was covered by Idaho STEM AC and WDC; however, in order to move towards a sustainable, cost share model, the program will ask participating organizations to cover or partially cover the stipend fee for the upcoming year. Not all organizations, especially small ones, will be able to cover this fee and therefore, STEM AC is submitting this request to WDC to cover the stipends of externs placed with these smaller organizations, particularly those in rural areas, so we can expand the reach of the program to these underserved populations.

Question: Campaign timeline

During the fall and winter, STEM AC will recruit potential participants through a media campaign. Applications for educators to be part of the program will open January 1, 2020 and close February 7, 2020. Applications will be reviewed and participants will interview with organizations in February and March, with placement/pairing occurring by April 1, 2020. The application for interested organizations will open in early October and will be announced at the Age of Agility Conference. The application will close December 31, 2019. A scheduled check-in with the extern and hosting organization by the Program Manager will occur during the summer. Final surveys will be given to participants in September 2020 to gather feedback and data on the program. A final report by Idaho STEM Action Center will be submitted to WDC in January 2021.

Organizational Capacity Resume

Question: Please attach an organizational resume that demonstrates your organization's capacity to complete this project.

[Organizational Resume_updated.pdf](#) (7/22/2019 12:26 PM)

Question: Please attach a resume or bio for the named project person.

[McFarlane_CV.pdf](#) (7/22/2019 12:28 PM)

Budget

A project budget will need to be uploaded as part of the application process. Please click on the link to the Outreach Committee Project Proposal Budget. There will be an option to download the budget template. Please complete the template and upload to the appropriate question in this

section.

Budget Sheet

Question: Budget

[STEM AC Externships Outreach Committee Project Proposal Budget Sheet 2020.xlsx](#) (7/22/2019 12:28 PM)

Question: Budget notes

We anticipate approximately thirty participants in the program next year. The program is shifting to a cost-share model with participating organizations; however, we recognize that not all organizations will be able to provide the \$5,000 stipend. Therefore, we budget 14 educator stipends to be provided in full or partially by STEM AC (5 stipends = \$25,000) and WDC (9 stipends = \$45,000). STEM AC, with the input from WDC, will oversee the application process, arrange reviewers for the applications, and develop and administer contracts with the educators or employers for the stipends (in-kind contribution from STEM AC for work performed by the Grants Coordinator/Data Analyst and Grants and Contracts Analyst). The Program Manager will oversee the coordination of the program, including placement of externs, check-ins with externs and organizations as well as follow up work with participants after the externships to ensure participants are utilizing their experience in the classroom (in-kind contribution from STEM AC for work performed by Program Manager). STEM AC will administer final surveys to receive qualitative and quantitative feedback from participants to assess the program (in-kind contribution from STEM AC for work performed by Grants Coordinator/Data Analyst). To promote the program and recruit participants, STEM AC will launch a marketing campaign through social media, press releases, trade publications, district level contacts and the STEM AC newsletter. Media costs will fund graphic design work for announcements and materials, as well as contract work with STEM AC's Public Relations Director.

Outcomes

Question: Entity responsible for tracking and reporting

Idaho STEM Action Center

Question: What is the potential for increasing the awareness of careers for Idahoans?

Educators are mentors for students and often provide the only exposure students have to potential career options that are different from their parents. However, educators typically transition from college directly into teaching positions and therefore have limited experience with industry jobs. This program provides educators valuable insight into career opportunities for their students. This summer, externs have gained a wealth of experience in fields as diverse as virtual reality, data analysis, health care, meteorology, advanced manufacturing and water quality - all STEM fields. It will become increasingly important that Idaho educators are informed about potential STEM careers, as STEM jobs continue to grow, emerge and change in Idaho.

STEM jobs are expected to grow 23% in the next five years and 16 of the 20 fastest growing careers in Idaho require STEM skills.

Question: What is the anticipated reach of the project?

In the first year of the program, we anticipated ten participating educators; however, we received enough applications and successful matches with organizations to place 16 educators. These educators will return to their classrooms this fall and directly impact their students based on their experiences as externs. In meeting with externs at their host sites, many expressed how transformative their experience has been in terms of their understanding of what is needed in the workforce. Consequently, they will be placing increased emphasis in their classrooms on collecting and analyzing data, authentic problem based learning, developing specific collaboration skills and the soft skills that are critical in a business setting.

Indirectly, educators may share their experience with fellow educators, their administrators and other students. We are already receiving inquiries from classroom teachers regarding the program for next year. Educators will also have this valuable experience to draw on for years to come. As we continue to expand this program with WDC and launch a media campaign, we plan to reach more educators, their students and their community.

Question: What are the anticipated project outcomes?

- Educators receive hands-on work experience in a STEM related field.
- Educators learn about career opportunities in Idaho and the skills/knowledge needed to pursue those careers.
- Educator's teaching is enriched and strengthened by bringing career relevance to student learning.
- Students will learn about local career opportunities and why what they are learning is important, relevant, and immediate to them.
- Employers learn from educators about ways in which they can support the STEM talent pipeline (e.g. mentoring, guest speaking, curriculum development) to prepare their future workforce.

Question: What metrics and or reports will be delivered to the committee, and when?

STEM AC will collect data and information from participating educators through the application, final surveys and informal discussions with participants. STEM AC will compile participant feedback and metrics into a report to be submitted to WDC in January 2021. Metrics of success:

- Number of educators that complete the program.
- Number of educators that report an improvement in their teaching practices by incorporating new knowledge, labor market information, and employment skills that meet current industry standards.
- Number of educators that report sharing their experience and knowledge with their students, peers and administrators.
- Number of students that report an increase in career awareness and interest.

Outreach Committee Project Proposal Budget

Description	Amount/Value	Source
Educator Stipend	14 @ \$5,000/each = \$70,000	\$25,000 from STEM AC and \$45,000 from WDC
Marketing	\$10,000	\$5,000 from STEM AC (in-kind) and \$5,000 from WDC
Data Analyst (Crispin Gravatt)	150 hours @ \$34.30/hr = \$5,245	STEM AC - in-kind
Grant and Contract Analyst (Stephanie)	40 hours @ \$31.49/hr = \$1,260	STEM AC - in-kind
Program Manager (John MacFarland)	400 hours @ \$35/hr = \$14,000	STEM AC - in-kind

PLEASE COMPLETE

Totals	
In-Kind	25505.00
Match	25000.00
Grant Request	50000.00
Total Project budget	100505.00

John McFarlane, Ed.S.
5 Canyon Trail
Boise, ID 83716
(208) 345-8653
Cell: (208) 761-7672
jemac33@aol.com

Education

Education Specialist – Educational Leadership
University of Idaho/Boise Campus
April 2005

Master of Education – Secondary Curriculum
Western Washington University/Bellingham, WA
August 1991

- Graduate Assistant
- Director of the Educational Technology Learning Lab

Bachelor of Science – Environmental Studies/Social Impact Assessment
Western Washington University: Huxley College of Environmental Studies/Bellingham, WA
May 1982

Certifications

Administrator

School Principal Pre-K-12
Superintendent

Standard Secondary Teaching Certificate

Social Studies 6-12
Science 6-12

Professional Experience

Contractor - Idaho STEM Action Center
July 2018 to Present

- Program Coordinator for the following programs:
 - MakerMinded
 - STEM School Designation
 - Externships
 - STEM Leadership Training
 - VISTA/Work U

Superintendent/Secondary Principal/Teacher – Basin School District
April 2008 to June 2018

- Course Taught: Biotechnology

Secondary Principal/Teacher – Basin School District
August 2004 to April 2008

- Courses Taught: Biotechnology, Beginning Guitar

Teacher/Assistant Administrator – Basin School District
August 1988 to August 2004

- Courses Taught: Science, Social Studies, English, Math, Beginning Guitar
 - Grades Taught: 5-12
- Administrative Responsibilities Included: Curriculum Director, Mentor Program Director, Student Discipline, Accreditation Committee Chair, Gifted/Talented Coordinator, Budget Committee

Teacher – Mesa High School, Mesa, Arizona
August 1986 to June 1988

- Courses Taught: Biology, Life Science

Research Biologist – Washington Department of Wildlife
1982 to 1984

- Steelhead Program Biologist
- Hatchery Technician

References Available Upon Request



Angela Hemingway
Executive Director
802 W. Bannock St.
Suite 900
Boise, ID 83702

Our History and Mission

During the 2015 Idaho legislative session, a small group of visionary legislators, education leaders and industry stakeholders began a STEM Caucus that led to legislation creating the Idaho STEM Action Center. House Bill 302 became law on July 1, 2015 (Idaho Code §67-823). This new law enacts the Center to develop unique grant, training, professional development and student opportunities aligned to Idaho's workforce needs from kindergarten through career. Decisions related to the STEM Action Center are guided by a nine member Board appointed by the Governor. The Board is a unique blend of educational leaders from the State Board of Education, State Department of Education, Idaho Department of Labor, Idaho Department of Commerce, and state industry and business leaders.

Mission

Engineering innovative opportunities for educators, students, communities and industry to build a competitive Idaho workforce and economy through STEM and Computer Science education.

Vision

A diverse, equitable, thriving ecosystem for a prosperous, STEM-literate Idaho.

Areas of Focus

Per legislation, Idaho STEM Action has five STEM focus areas:

- 1) Student learning and achievement (including underrepresented populations)
- 2) Student access to STEM including equity issues
- 3) Teacher professional development and opportunities
- 4) College and career STEM pathways
- 5) Industry and workforce needs

These focus areas are targeted through three primary goals:

- 1) Advance equitable access to high-quality STEM+CS opportunities for educators, students, and communities.
- 2) Align STEM education and workforce needs throughout Idaho.
- 3) Increase awareness of the importance of STEM throughout Idaho.



Our Performance

Performance Measure		FY 2015	FY 2016	FY 2017	FY 2018
Goal 1: Coordinate and facilitate implementation of high-quality STEM programs throughout Idaho					
1. Number of student interactions from STEM AC opportunities	actual	N/A	10,428	204,000	406,239
	target	N/A	N/A	25,000	204,000
2. Number of educator interactions from STEM AC opportunities	actual	N/A	1,200	4,800	12,633
	target	N/A	N/A	5,000	5,000
3. Total number of grant opportunities offered	actual	N/A	3	12	35
	target	N/A	N/A	7	12
4. Percentage of applicants receiving funding via competitive opportunities	actual	N/A	22%	70%	67%
	target	N/A	N/A	30%	70%
Goal 2: Align STEM education and workforce needs throughout Idaho					
5. Value of industry contributions, grants, and donations to STEM AC (as cash, cash equivalent, and in-kind)	actual	N/A	\$72,000 cash	\$205,000 cash + \$662,000 in-kind	\$736,928 cash + \$1,742,217 in-kind
	target	N/A	N/A	Increase contributions until \$500,000 is reached annually by FY20	\$300,000 cash + \$750,000 in-kind
6. Number of opportunities for workforce engagements in high-demand fields	actual	N/A	0	1	32
	target	N/A	N/A	Target will be set after the FY17 data is collected and analyzed	2
7. Number of mentors and students involved in STEM AC's virtual, project-based mentorship platform	actual	N/A	0	0	60 mentors 50 educators
	target	N/A	N/A	IDLA constructed the Mentorship Platform during FY17	The Mentorship Platform launched in March 2018



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Performance Measure		FY 2015	FY 2016	FY 2017	FY 2018
Goal 3: Increase awareness of STEM throughout Idaho					
8. Number of monthly communication efforts	actual	N/A	4 newsletters; 1,500 subscribers	10 newsletters; 4,300 subscribers	10 newsletters; 4,768 subscribers 1,600 Facebook, Twitter and Snapchat followers
	target	N/A	N/A	10 newsletters; 2,000 subscribers	10 newsletters; 6,000 subscribers by 2021
9. Number of grants and professional development (PD) opportunities which target traditionally underrepresented populations	actual	N/A	3 grants; 1 PD	3 grants; 2 PDs	100% of STEM AC opportunities (35 grants; 78 PDs) now include requirement to support under-represented populations
	target	N/A	N/A	Support at least three grants and two PDs in both STEM and CS by FY20	Continue to support at least 3 grants and 2 PDs in both CS and STEM



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Our Team (FTEs and Relevant Team Members for Externship Program)

Angela Hemingway (Executive Director) – Ph.D. in Curriculum and Instruction, M.S. in Microbiology, B.S. in Biology and Chemistry, and a Teaching Certificate in Science from Boise State University; fourteen years of experience as a high school and college STEM educator; 3 years in Assessment and Accountability for the State Department of Education.

Erica Compton (STEM Program Manager) – B.A. in Elementary Education from Boise State University; over 30 years of experience in hands-on STEM education and training including five years as a Project Coordinator for the Idaho Commission for Libraries; state ambassador for the national Maker Movement.

Finia Dinh (Computer Science Program Manager) – B.S. from Boise State University; over 10 years of recruiting experience within private, educational and public sectors and 3.5 years of experience as a Regional Business Specialist at the Department of Labor.

Sondra Chad (Financial Officer) – B.A. of Business Administration in Entrepreneurship Management and General Business and a minor in Marketing from Boise State University; three years accounting and management services for nine different state agencies while tracking and disbursing multi-million dollar cash flows with the Idaho Division of Financial Management.

Stephanie Lee (Grants and Contracts Analyst) - over 10 years of experience in the development, deployment, and administration of statewide programs working for the Idaho State Department of Education supporting districts, schools, and state-wide education leaders.

Crispin Gravatt (Data Analyst) – B.A. in Sociology, French, Gender Studies, and Economics from Boise State University; selected in 2014 to represent ten states and various US territories as a human rights delegate discussing the ways technology changes education around the world; 3 years of experience with STEM AC ensuring effective program accountability.

John McFarlane (MakerMinded Coordinator) – B.S. in Environmental Studies, M.Ed. in Secondary Curriculum and an Ed.S.; 33 years of experience as a classroom science teacher, the last 30 of which were in the Basin School District in Idaho City, where he also served as secondary principal and superintendent.