Part I – Agency Profile

Agency Overview

Equitable access to high-quality STEM education should not be considered a privilege; it is a necessity. A robust education, including STEM, will ensure that Idaho's workforce has the necessary skills to be prepared for the jobs of the future. Year after year, thousands of Idaho STEM jobs remain unfilled as demand for a STEM-skilled workforce has significantly outpaced supply. The result is lost wages for Idahoans as STEM jobs consistently pay twice the median wage of non-STEM jobs. If filled, STEM jobs would provide an increase to personal income for Idaho citizens.

However, not all Idaho students have equitable access to STEM opportunities. STEM AC is tasked with closing this equity gap by providing diverse STEM opportunities for students, educators, and communities. A "general, uniform, and thorough" system of education is a mandate of Idaho's constitution. Equity is at the heart of uniformity and thoroughness. Robust K12 experiences, including exposure to engaging, hands-on STEM education and careers, are essential to prepare students for future jobs. Now, more than ever, students and Idaho's workforce need to be equipped with the critical thinking, problem-solving, and computational literacy skills required for many jobs. Enhancing the skill sets of Idahoans in STEM-focused areas will support the need to navigate the ever-changing world, including the reliance on digital technologies and the infusion of digital competency into all facets of life, school, recreation, and the workforce.

These coordinated statewide STEM-focused efforts will support Idaho as an in-demand business destination. Idaho will have a citizenry that not only recognizes the importance of STEM, but one that also possesses a workforce with the necessary STEM skills that employers are demanding. A highly skilled STEM workforce will lead to increased investment and business opportunities throughout Idaho. Educators will have the necessary STEM skills and resources to engage students. Students will have equitable access to STEM education and will possess the 21st century skills that all Idaho employers require: critical thinking; problem-solving; collaboration; and innovation. Ultimately, Idaho students will choose to stay in Idaho to live and to work because the state can offer them solid jobs within their areas of interest, and they will possess the resilience to ensure personal success within Idaho's changing economy. The result of these collaborative efforts will be an increase in the number of businesses throughout the state and an increased number of jobs available to Idahoans. In turn, these strategic partnerships will bolster Idaho's economy and lead to long-term economic prosperity for the state and its citizens.

Core Functions and Idaho Code

STEM AC's enacting legislation (Idaho Code 67-823) focuses on five broad areas: 1) coordination of state-level STEM-related activities including equity; 2) promotion of STEM through best practices in education; 3) support of high-quality professional development and grants for educators; 4) facilitation of STEM-related competitions, fairs, camps, and student programs; and 5) engagement of private industry in the development, implementation, and sustainability of STEM AC programs. Fulfilling legislative intent is accomplished by offering grant and professional development opportunities to educators, students, and communities, and measuring outcomes from those activities.

STEM AC has also partnered with other state agencies and businesses to bring forth the following STEM legislation:
- **Computer Science Initiative** (Idaho Code 33-1633, passed 2016). This legislation directs STEM AC to focus on critical training and educational needs to help populate Idaho's growing need for a tech-savvy workforce.
- **STEM School Designation** (Idaho Code 33-4701, passed 2017). In collaboration with the Office of the State Board of Education (OSBE), this designation is formally recognized by OSBE and the Governor's Office. Six schools have been designated in the first two years.
- **CS for All** (Idaho Code 33-1634, passed 2018). This legislation requires all Idaho high schools to offer at least one computer science course starting in 2020.
- **STEM Diploma** (Idaho Code 33-523, passed 2018). This legislation provides recognition for students who have taken STEM course work that is significantly more rigorous than state graduation requirements.

The White House also recognizes the importance of STEM and STEM education and has released the federal STEM strategic plan with the goals of: 1) Building strong foundations for STEM literacy; 2) Increasing diversity,

equity, and inclusion in STEM; and 3) Preparing the STEM workforce for the future. To accomplish these goals, one of the STEM pathways is to develop and enrich strategic partnerships by fostering STEM Ecosystems that unite communities. To accomplish this, STEM AC continues to form strategic partnerships to build the Idaho STEM Ecosystem. Once fully developed, the Idaho STEM Ecosystem will serve all communities and enhance STEM engagement, thereby allowing Idahoans to leverage local resources in collaboration with statewide STEM stakeholders.

A key to STEM AC's success is significant industry engagement with programs, projects, and outreach efforts. Idaho businesses have shown they are committed to supporting STEM education by providing in-kind and cash support to STEM AC opportunities. In FY20 alone, STEM AC raised over $1.75M in external funding. This is accomplished through sponsorships of student competitions, integration of collaborative industry-educator projects funded via grants, professional development guided by industry input, STEM professionals serving as mentors and volunteers, and through various workforce development initiatives such as public-private partnerships. Additionally, STEM AC Foundation was created to engage more effectively with a broader network of businesses.

Mission Statement: Engineering innovative opportunities for educators, students, communities, and industry to build a competitive Idaho workforce and economy through STEM and computer science education.

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

Revenue and Expenditures

Revenue	FY 2017	FY 2018	FY 2019	FY 2020
General Fund	2,420,700	4,489,500	2,575,900	2,536,700
Dedicated	2,100,000	2,100,300	2,100,700	3,106,000
Total	4,520,700	6,589,800	4,676,600	5,642,700
Expenditure	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**
Personnel Costs	329,335	390,185	482,169	569,802
Operating Expenditures	3,266,449	3,603,507	5,072,591	4,658,166
Capital Outlay	28,477	7,054	11,437	5,285
Trustee and Benefit Payments	N/A	2,018,994	N/A	N/A
Total	3,624,261	6,019,740	5,566,197	5,233,254

Profile of Cases Managed and/or Key Services Provided

Cases Managed and/or Key Services Provided	FY 2017	FY 2018	FY 2019	FY 2020
Student interactions through competitions, camps, and classroom opportunities	204,000	406,239	442,318	164,687
Educator engagements through professional development, grants, and sponsorships	4,800	12,633	35,768	22,369
STEM Outreach Activities	140	143	288	200

Red Tape Reduction Act

Each agency shall incorporate into its strategic plan a summary of how it will implement the Red Tape Reduction Act, including any associated goals, objectives, tasks, or performance targets. This information may be included as an addendum.

	As of July 1, 2019	As of July 1, 2020
Number of Chapters	0	0
Number of Words	0	0
Number of Restrictions	0	0

FY 2020 Performance Highlights

-The Computer Science Initiative continues to enhance Idaho student access to computational thinking and coding. Between the 2017/2018 school year and the 2018/2019 school year, Idaho saw an 11% increase in the number of teachers teaching computer science in secondary schools. As a result, there was an 18% increase in the number of students taking computer science courses. This significant increase in accessibility to computer science courses is directly correlated to the needs of Idaho businesses and will help ensure that Idaho students are prepared for the jobs of the future.

-The Rural STEM Program focuses on developing local communities of educators invested in creating quality maker-centered/STEM learning opportunities for youth while engaging diverse groups and organizations within the communities to build sustainability.

-STEM AC has created a very successful Educator Externship Program and has placed 40 educators into businesses for summer work to help educators understand the unique needs of Idaho businesses.

-STEM AC is in the process of building a statewide STEM Ecosystem and crafting metrics that can guide the work of the Ecosystem and serve to ensure that goals are met.

Part II – Performance Measures

Performance Measure		FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Goal 1: Advance equitable access to high-quality STEM+CS opportunities for educators, students, and communities						
1. Number of student engagements	actual	204,000	406,239	442,318	164,687	----------
	target	*25,000*	*204,000*	*406,239*	*331,000*	*331,000*
2. Number of educator interactions	actual	4,800	12,633	35,768	22,369	----------
	target	*5,000*	*5,000*	*12,633*	*26,800*	*26,800*
3. Total number of grant opportunities offered	actual	12	35	10	4	----------
	target	*7*	*12*	*35*	*4*	*4*
4. Percentage of applicants receiving funding via grant opportunities	actual	70%	68%	67%	70%	----------
	target	*30%*	*70%*	*70%*	*50%*	*50%*
Goal 2: Align STEM education and workforce needs throughout Idaho						
5. Value of industry contributions, grants, and donations (as cash, in-kind, and cash equivalent)	actual	$205,000 cash + $662,000 cash equivalent and in-kind donations	$736,928 cash + $1,742,217 cash equivalent and in-kind donations	$1,340,500 cash + $4,446,511 cash equivalent and in-kind donations	$1,750,583 cash + $4,880,204 cash equivalent and in-kind donations	---------
	target	*$250,000 cash and create system to track in-kind*	*$500,000 cash + $750,000 in-kind and cash equivalent*	*$1M cash + $1.7M in-kind and cash equivalent*	*$1M cash + $2M in-kind and cash equivalent*	*$1M cash + $2.5M in-kind and cash equivalent*
6. Number of opportunities for workforce engagements in high-demand fields	actual	1	32	48	43	----------
	target	*Data collected*	*2*	*40*	*36*	*40*
7. Number of mentors involved in STEM AC's educational programming	actual	0	60 mentors	833 mentors serving 18,824 students	*To be reported in June 2021	----------

Performance Measure		FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
	target	*Platform construction*	*Platform launched*	*500 mentors*	*800 mentors and 18000 students*	*800 mentors and 18000 students*
Goal 3: Increase awareness of the importance of STEM throughout Idaho						
8. Number of monthly communication efforts	actual	Newsletters reached 4,300 subscribers	Newsletters reached 4,768 subscribers; 1,600 social media followers	4,941 newsletter subscribers, 2,476 social media followers, 2,365 monthly website visits	5,475 newsletter subscribers, 4,064 social media followers, 3,000 monthly website visits	----------
	target	*Newsletters will reach 2,000 subscribers*	*Newsletters will reach 5,000 subscribers by 2021*	*Newsletters will reach 5,000 subscribers by 2021; continued increase in social media presence; track website utilization*	*Newsletters will reach 5,000 subscribers, 2,800 social media followers; 3,000 monthly website visits*	*Newsletters will reach 5,500 subscribers, 4,300 social media followers; 3,000 monthly website visits*
9. Percentage of grants and PD opportunities which include support for traditionally underrepresented populations in STEM	actual	50%	100%	100%	100%	----------
	target	*25%*	*50%*	*100%***	*100%***	*100%***
10. Resources and Best Practices Database Utilization	actual	N/A	Database was designed and developed	179 visitors/month	291 visitors/month	----------
	target	*N/A*	*N/A*	*Database launch*	*500 visitors/month by 2023*	*500 visitors/month by 2023*

*Metric #7 will be reported in final reports that are now due May 2021. This delay was caused by impacts of COVID-19.

**Metric #9 will be phased out as all STEM opportunities now require that underrepresented populations in STEM are supported.

Performance Measure Explanatory Notes

Between FY2020 and FY2021, STEM AC received $1.5 million less in state cash appropriation for the CS Initiative (Idaho Code 33-1633). While STEM AC raised more than $1.5 million through external funding, it should be noted that industry and grant funding was not intended to supplant state funding for CS. In addition, 99% of the funds received from external sources were restricted funds, directed at a specific program, event, or activity. Restricted funds do not allow STEM AC to meet all the statewide mandates in the CS Initiative. As a result of the change in the state cash appropriation, STEM AC is expecting a continued decrease in the number of students, educators, and communities it can serve. In addition, a number of STEM AC programs were delayed due to the impacts of COVID-19. Since the ongoing impacts of COVID-19 are still unknown, STEM AC is predicting that it should be able to serve similar numbers of students, educators, and communities as it anticipated for FY20. The combined impacts of the state cash appropriation reduction and COVID-19 resulted in significantly fewer programs which in turn significantly reduced impact numbers.

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