

Board Meeting

October 19, 2020



IDAHO
STEM
ACTION CENTER

Zoom

2:30 - 4:00 pm

Approval of July Minutes

Request for **Motion** to Approve
Minutes from July



STEM Ecosystem Strategic Planning Meetings and Partners



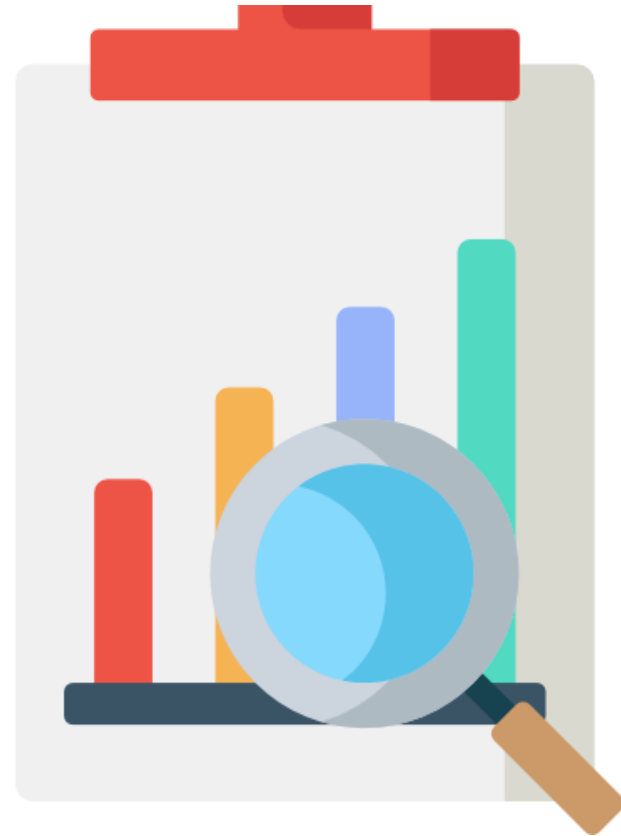
<https://stem.idaho.gov/idaho-stem-ecosystem/>



SURVEY DATA PRESENTATION

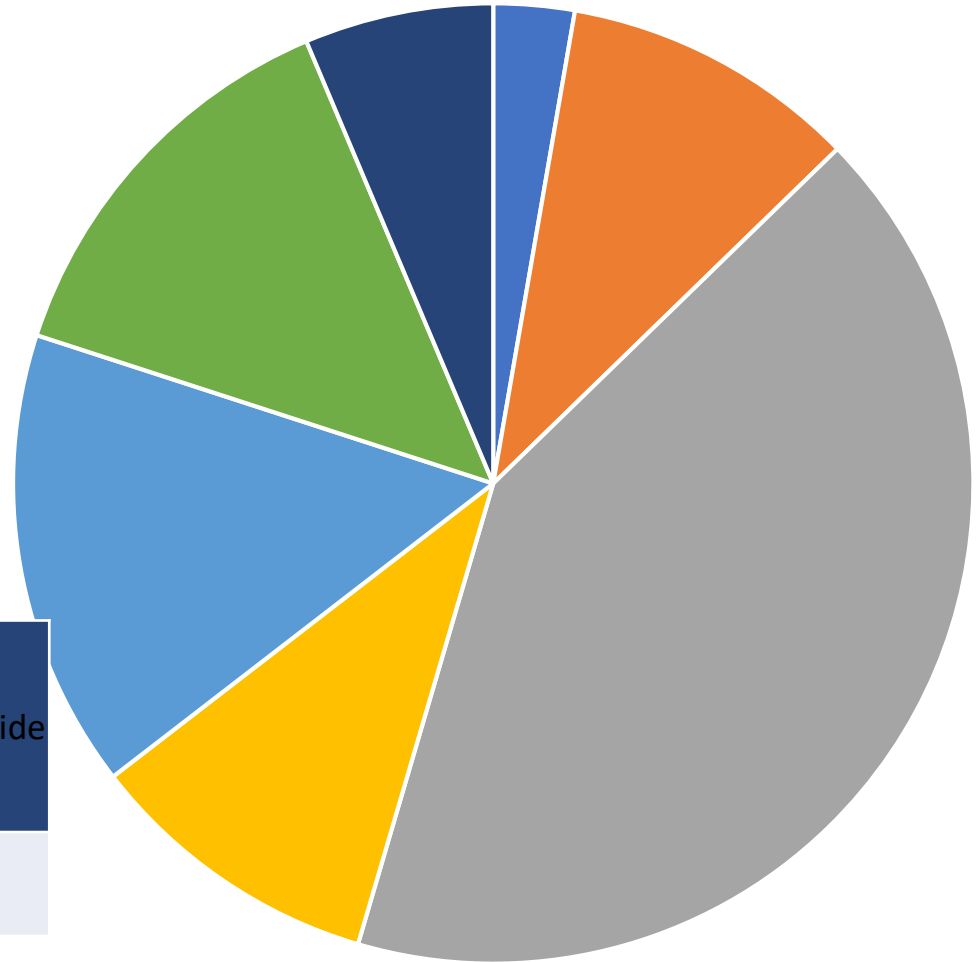
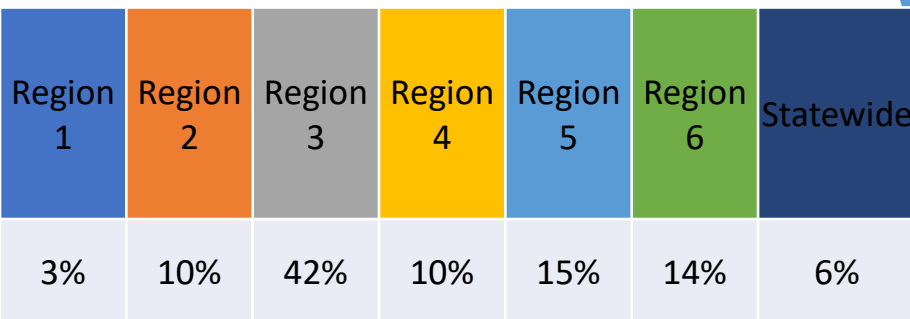
Statewide Quantitative

- **Note:** More complete data is still forthcoming- this is a preliminary overview to help facilitate discussion
- Next steps are focus groups & interviews – more info coming soon



Who gave input?

In which geographic region is your organization located?

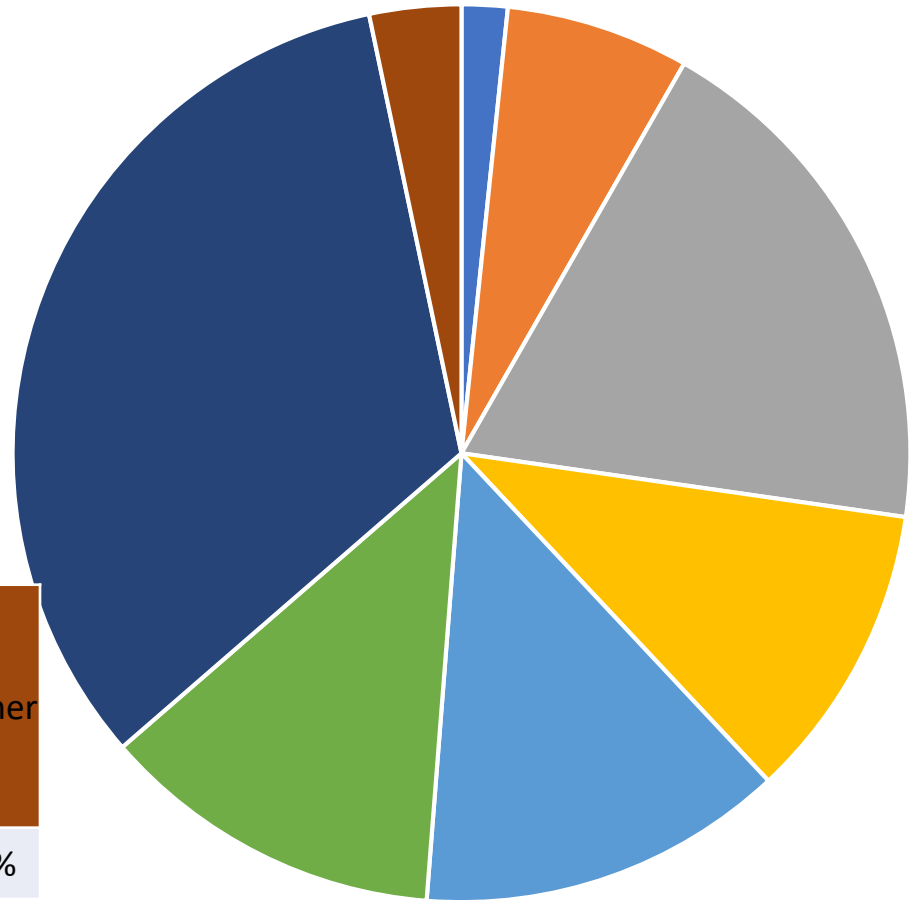


■ Region 1 ■ Region 2 ■ Region 3 ■ Region 4 ■ Region 5 ■ Region 6 ■ Statewide



Who gave input?

Which geographic region(s) does your organization serve?



Region 1

Region 2

Region 3

Region 4

Region 5

Region 6

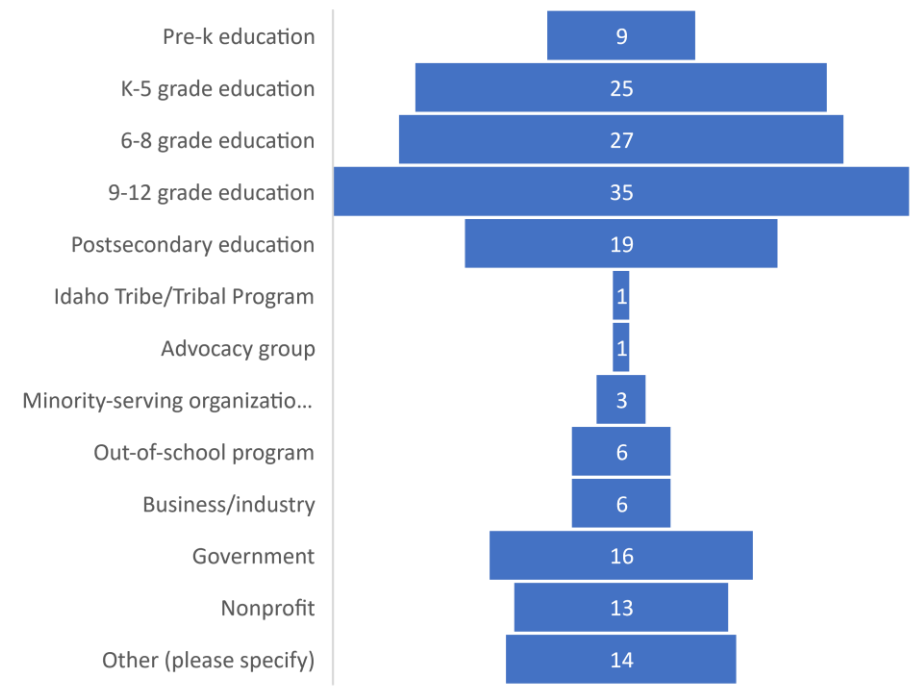
Statewide

Other (please specify)

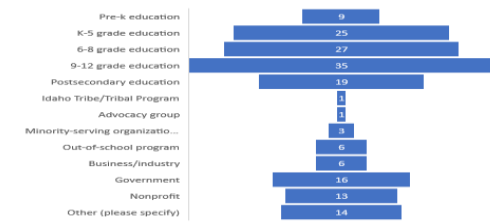
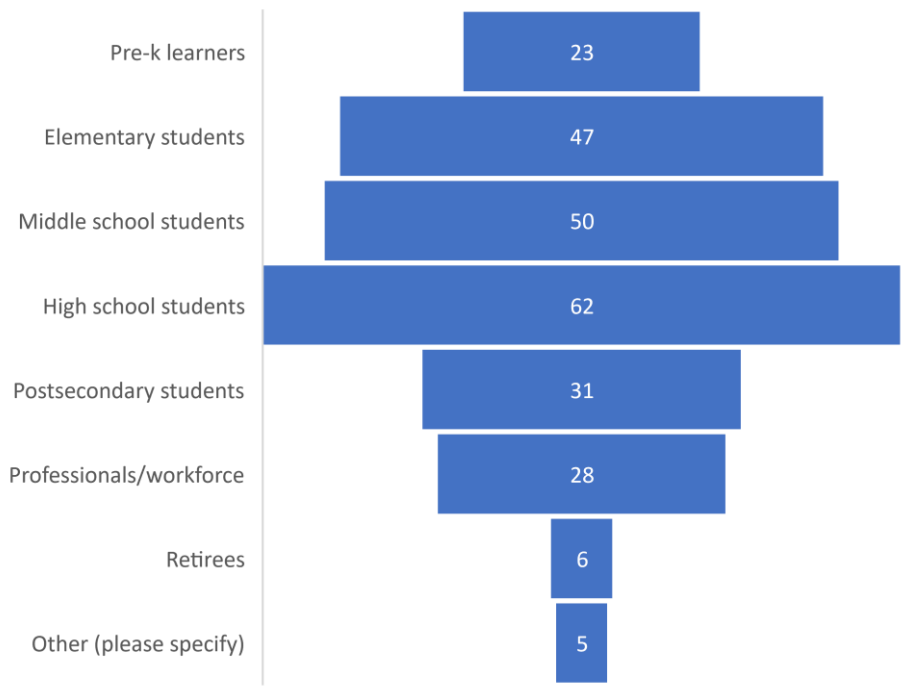


Who gave input?

Which description best fits your organization?



Which age ranges does your organization primarily impact?



Strongest STEM supporters or implementers in your community

Industry	29%
Post-secondary	17%
STEM AC	8%
OoS	18%
School	13%
Other	15%

Schweitzer	Clearwater	Seekins	Ph	Lewis-Clar	Lewiston	Valley Boy	Head Start	Healthcare	Boat Man	Avista Util
Technical	Idaho Natl	Naval Res	Bureau of	National F	Idaho Fish	Goshen N	Idaho Stat	College of	Battelle E	
STEM Acti	INL	BSU	Engineerin	Reuseum	HP Women	VR Techn	Meridian L	Eastern Id	ISU	
College of	STEM Acti	K-12 STEM	Boise Stat	NNU	College of	TVISTEM	Discovery	First Robo	local high	
STEM Acti	Discovery	Project Le	Micron	HP	Boise Sch	Boise Stat	Reuseum	ZooBoise	West Ada	
Micron	Boise Sch	Boise Wat	Boise Fish	Discovery	SUEZ	Boise Urba	Boise Stat	PCS Adv	Women in	
Idaho Tect	FIRST Rob	Idaho STE	REC found	Idaho Stat	Associatio	ACM Spec	IEEE and I	Many	many local em	
Micron Fo	Discovery	Reuseum	STEM AC	Women In	Idaho Out	INL	Boise State	- College of Engineer		
Idaho STE	FIRST Rob	City-run	State-run	Peregine	Idaho Post	Boise Stat	College of	Western Idaho		
Bill Ebener	Herrett Co	Chf Bar	MathCoun	CSI Course	CSI Comm	ISTEM	First Federal			
Idaho Natl	Idaho Stat	College of	BYU Idaho	ON Semic	Math Cour	Premier To	Idaho Technology Council			
Grangevill	Grangevill	Clearwater	Clearwater	Elk City Sci	Kids Klub	Grangeville	Centennial Library			
Micron	BSU	DCI	STEM AC	Our local	Idaho Aft	HP and soft	ware engineers (Hour of Code)			
INL	Idaho Fall	College of	Fluor Idah	Museum o	Veolia Nuc	Idaho Falls	Power			
Idaho Stat	Idaho Natl	Bayer	On Semic	First Robo	SE Idaho U	Local School	Districts			
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Boise Stat	University	SWIMA	BITE	SBOC	ITC	Trailhead				
College of	Idaho Natl	Economic	Museum o	Departme	College of	Science and Engineering at ISU				
STEM AC	Workforce	Area Sch	Boise Stat	Idaho Dep	College of	Western Idaho				
Idaho STE	William A	The Laura	Cross Char	Idaho Natl	Boise Stat	Idaho				
Boise Stat	ISTEM	NSTA	Idaho Regi	Innovator	Gizmo (at NIC)					
Caldwell	Chambers of	CWI	TYCC	Micron	HP					
ICTE	STEM Acti	SDE	Idaho Legi	IEFA	ISAS					
ISU STEM	Museum o	First Robo	Bengal STE	Super STE	ISTEM					
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Public Libr	School Lib	Idaho Out	Idaho STE	Boise Stat	Loft Ext	ension - 4H				
Idaho Stat	ON Semic	School Dis	INL							
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University	North Ida	Silver Lake	Idaho Natl	Jump Center						
Emmett M	Gem Coun	Idaho Bird	University	NASA Ames	Center					
Univ of Id	Gizmo - Cd	Ni STEM	Givernit	Ida	NIC					
Science de	math dept	vocational	scholastic	robotics club						
Schweitzer	Paladin O	Vista Out	Lewiston I	St. Joseph		Regional Medical Center				
Micron Fo	STEM AC	INL	Boise Stat	Trailhead						
Boise Stat	INL	Micron	Idaho Row	U.S. Army						
Informal e	formal ed	business	communit	University						
INL STEM	Museum o	College of	Kompas	A White Pink		Charter School				
INL	Rocky Ma	College of	Workforce	YMCA						
Idaho Tect	STEM Acti	Sage Intern	Boise schools							
Math & Co	Engineerin	Biology De	Chemistry Dept							
Library	Lemhi's Af	Youth Emp	Computer Zen (business)							
Idaho STE	Micron Fo	Laura Mo	HP							
Idaho Busi	Idaho Wor	Office of	Idaho Career and Technical Education							
Local scho	Local Libr	Museum o	INL							
Idaho STE	Palouse ST	Schweitzer	J. Russell	Elementary School						
Boise Stat	Idaho Disc	Boise Sch	Micron							
STEM AC	DCI	ION	Micron							
Mountain	Micron	City off Mt	Mountain Home School District (middle school/ elementary)							
Lapwai Hig	Nez Perce	Nez Perce	Nez Perce	Tribe Forestry						
Hillico Tect	Clearwater	Idaho STE	Nezperce	Community Library						
ISU	iStem Acti	INL	On Semic	conductor						
ISU	Symplot	ON semic	School dist	ict 25						

The Leado The Tendo A few local businesses
Preschool age kids and Mom

I coordinate STEM programming with our students
INL On Semic Idaho State University
Future Citi Science Of Boise State University
Oneida County Library
Local Farr INL BYU-Idaho
STEM Acti Boise State University

Vista Outd Schweitzer Engineering Laboratories
k-12 Schoc Public Library
Idaho Stat INL ON

School
BSU stem /Stem action center
Children's CSI Discovery Center

INL STEM Museum of Compass A White Pine Charter School
INL Rocky Moi College of Workforce YMCA
Idaho Tect STEM Acti Sage Intern Boise schools
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Idaho STE Palouse ST Schweitzer J. Russell Elementary School
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School
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Children's CSI Discovery Center

Salmon Riv Computer Zen
Idaho Stat INL
I don't thir Idaho STE Some collaboratin here or there with PCSEdventures.
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Burien Pub Cassia County School District
All college High Schools
School Dis Public Lib Economic Development Organization
Idaho Sch Idaho STE Action Center
Stem acti Micron

Local Agri Agriculture Science Program
STEM Action Center
Century 2 Library
JB Simola Elementary School
STEM Action Center
university o moscow school system
ION STEM AC
Idaho STE Idaho Career and Technical Education
State Department of Education
Schools
DOT Foods - supporter
Lewiston City Library
Blaine Cou Panley Pub Community Library

College ho High School Health programs

Tribes University of Idaho
STEM Acti Micron



My community knows what STEM <u>means</u> .	My community shows <u>interest</u> in STEM.	My community <u>values</u> STEM skills.	STEM <u>careers</u> are available in my community.	My community understands that STEM is important to its <u>long-term</u> economic health and prosperity.
3.94	4.01	4.09	3.98	3.67
78.85%	80.19%	81.73%	79.62%	73.40%
0.87	0.83	0.81	0.97	0.95



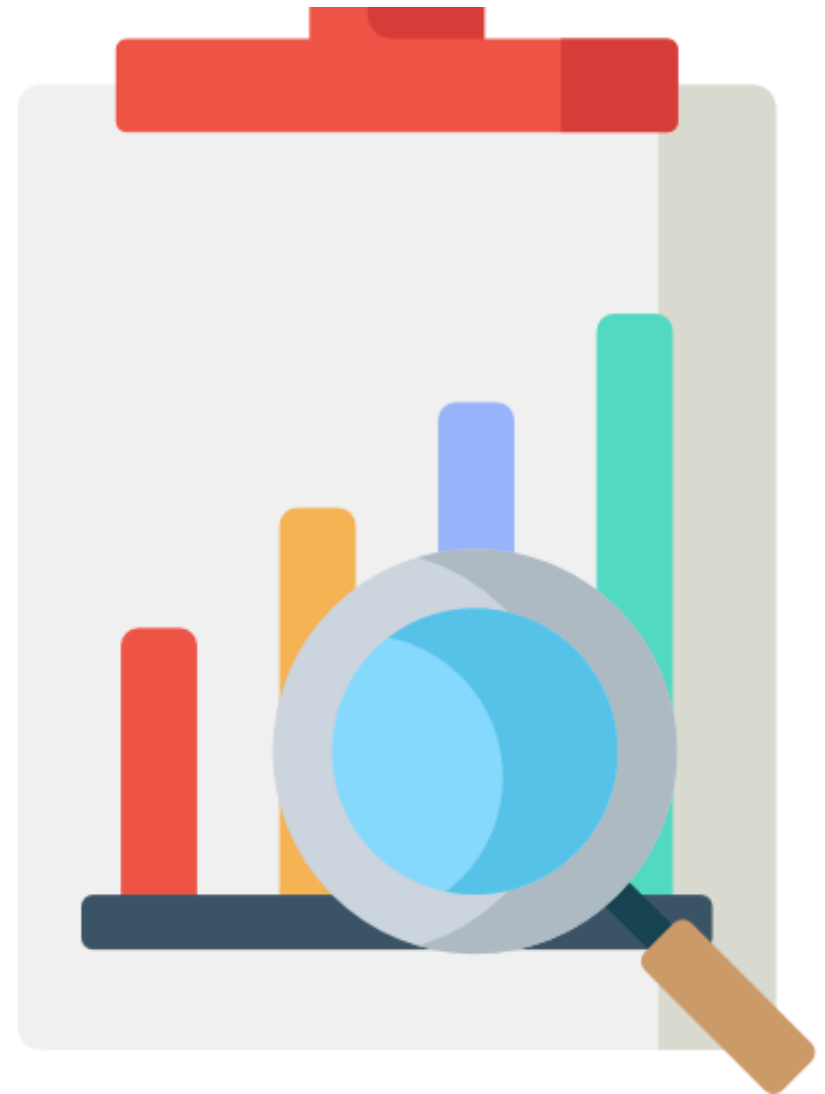
My community has available <u>infrastructure</u> to support STEM opportunities .	My community has <u>technology</u> available to support STEM opportunities.	My community has <u>funding</u> available to support STEM opportunities.	My community has <u>human power</u> available to support STEM opportunities.	My community has <u>leadership</u> available to support STEM opportunities.
3.53	3.54	3.24	3.61	3.73
70.58%	70.87%	64.71%	72.12%	74.56%
0.99	0.97	1.05	0.95	0.87



SURVEY DATA PRESENTATION

Regional Qualitative

-Data overview of highlights
from open-ended/list
responses analyzed by
region (1&2; 3&4; 5&6)



Defining community



Regions 1 & 2

- Rural
- Remote
- Agricultural
- Tribal presence
- Strong connections to land
- Mixed industry, largely featuring forestry and agriculture

Regions 3 & 4

- Statewide/regional- big, diverse population
- Specific industry focus/gov agencies
- Local- peripheral rural communities
- Hispanic populations
- Low SES populations

Regions 5 & 6

- Rural
- Remote
- Agricultural
- Hispanic/Indigenous populations
- Socioeconomic divides create/reinforce educational divides

Resources



Regions 1 & 2

Available

- Specific programs
- Higher education networks

Missing

- Funding
- Coordination; Connection between industry & education
- Interest & awareness, especially for families

Regions 3 & 4

Available

- Volunteers
- Funding
- Training Opportunities
- Venues

Missing

- Ongoing Funding
- Staffing
- Resources
- Leadership
- Access & inequity
- Awareness
- Training
- Time

Regions 5 & 6

Available

- Industry funding support & volunteer expertise
- University student and professional volunteers
- Clubs/extracurriculars

Missing

- Leadership
- Additional humanpower
- Connection & communication strategies
- Funding

Partnering with others



Regions 1 & 2

- Specific programs or events
- Shared resources
- Funding
- Limited/none

Regions 3 & 4

- Events
- Trainings
- Outreach and Collaborations
- Provide volunteers and/or mentors
- Share resources
- Provide funding

Regions 5 & 6

- Events
- Extracurriculars
- Funding
- Volunteers
- Limited/None

Achievements



Regions 1 & 2

- Specific programs
- Placemaking (i.e. makerspace)

Regions 3 & 4

- Connect students to learning outside the “classroom”
- Offer trainings
- Host events
- Increase interest in STEM
- Received grants/funding
- Now offer CS
- Awarding more STEM/CS degrees
- Increase outreach efforts

Regions 5 & 6

- Very successful events
- Establishing new competition teams
- ISU invests in STEM

Measures of success



Regions 1 & 2

- Headcounts
- Surveys
- Fluency in program materials

Regions 3 & 4

- Surveys
- Participants counts
- Measure/track GO ON rates
- Number of projects completed
- Number of partnerships
- Funding received
- Outreach activities
- Resources provided

Regions 5 & 6

- Headcount/enrollment
- Surveys
- Certification/go-on rate/other standardized metrics

Regulatory/Policy needs



Regions 1 & 2

Organization

- Guidance from policymakers
- Unknown

Community

- Industry guidance
- Internet access

Regions 3 & 4

Organization

- Unknown
- State rules/legislation
- School Policies
- Liability
- Accreditation

Community

- Unknown
- Funding (state and federal)
- Specific demographic needs

Regions 5 & 6

Organization

- Guidance from policymakers
- Unknown

Community

- Industry guidance
- Internet access

Barriers to success



Regions 1 & 2

- Funding
- Cultural barriers
- Lack of devices/tech support

Regions 3 & 4

- Lack of funding
- Lack of equitable access
- COVID-19
- Lack of awareness/outreach needed
- Lack of time
- Politics

Regions 5 & 6

- Barriers to participation (transportation, language, registration fees, etc)
- Cultural attitudes toward STEM
- Geography

Equity approaches & needs



Regions 1 & 2

Approach Taken

- Target demographics
- Reduce barriers to entry (free to participate, hotspots, etc)

Supports Needed

- Funding
- Communication

Regions 3 & 4

Approach Taken

- Programs target URPs
- Programs open to all/inclusive
- Targeted outreach to URPs
- Partnerships
- None/unknown
- Use data to make decisions
- Targeted funding
- Diversity

Supports Needed

- Funding
- Training
- Diversity
- Support
- Unsure/unknown

Regions 5 & 6

Approach Taken

- Free/reduced cost programming
- Partnerships
- Population is largely underrepresented

Supports Needed

- Cultural shifts
- Guidelines on best practice, policy, etc

Take the Survey

Sign up to
participate in
our Oct. 30
Convening

- **SURVEY:**

- <https://www.surveymonkey.com/r/QFYLLKZ>

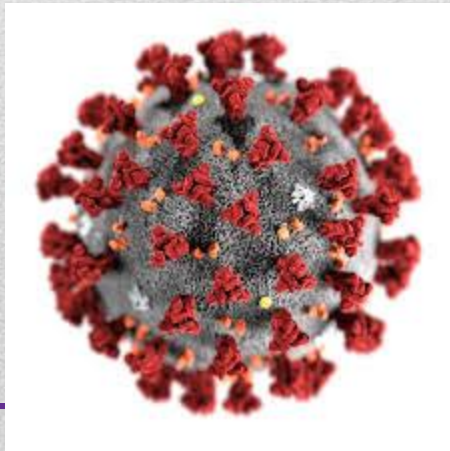
- **October 30 Convening:**

- Register here:
https://docs.google.com/forms/d/e/1FAIpQLSf3vZL-hb8MQU8htzZ2QcPfOKoIgrgIvyP48KLbemTKykEu_w/viewform



Impacts of COVID

- **Postponed Professional Developments**
- **Cancelled Events**
- **Donations and Funding Considerations**
- **Future Planning for PD and events**



CORONAVIRUS SAFETY



Follow these easy steps to help prevent the spread of COVID-19.



Disinfect surfaces around
your home and work.



Wash your hands for at
least 20 seconds.



Sneeze or cough?
Cover your mouth.

GOAL 1: Advance equitable access to high-quality STEM+CS opportunities for educators, students, and communities

- i-STEM with SDE, H&W + industry sponsors:
 - 36 strands at 6 sites with 400 educators (postponed to 2021)
- STEM Leadership PD
- Camp & OOS Grant
- STEM School Designation
- Idaho Codes
- Competitions
 - Junior Botball Challenge
 - Botball
 - eCYBERMISSION Program
 - ISEF – changed funding amounts significantly
 - Competition sponsorships



GOAL 2: Align STEM education and workforce Externship Update

- Jan. 4 – Feb. 12: Application Open for Businesses and Externs
 - Feb 8 – Feb. 14:
 - Apps reviewed by STEM AC/WDC
 - Potential candidates sent to businesses
 - Feb. 15 - Mar. 30: Candidates Interview with Businesses
 - By April 1: Candidates Offered Externships
 - May 30: Externships can begin
-



Externship Video



GOAL 2: Align STEM education and workforce STEM School Designation (Ideal) Timeline

- Idaho Code: 33-4701
- Schools can apply anytime, but onsite reviews typically occur in the fall; leads to STEM Certification
- November – School Visits and Certification
- January – Approval by STEM AC Board
- February – Approval by OSBE Board leads to STEM Designation
- Recognition of STEM Designation during legislative session
- Recognition Events at Schools in the Spring and financial support (10K will be reduced to 5K in FY21)



STEM Designated Schools (§33-4701)

- **Barbara Morgan STEM Academy**, K-5, West Ada
- **Bingham Academy**, 9-12, Blackfoot
- **Galileo STEM Academy**, K-8, West Ada
- **Temple View Elementary**, PK-6, Idaho Falls
- **North Idaho STEM Academy**, K-12, Rathdrum
- **Southside Elementary**, K-6, Lake Pend Oreille, Cocolalla



Updated STEM Designation Framework from Cognia

Unanimously adopted by the State Board in Sept!!



GOAL 2: Align STEM education & workforce needs throughout Idaho

STEM Diploma Discussion (Code 33-523)
and Data Request from OSBE



Diploma
This is to certify that



GOAL 2: Align STEM education with workforce needs throughout Idaho: GRANTS

- GEER funding for i-STEM Libraries - \$98,250
- FIRST Equity Community Grant for 6 new FRC teams - \$50,000
- Laura Moore Cunningham Foundation for FRC - \$30,000
- Idaho Space Grant Consortium for ISEF - \$25,000
- National Science Foundation for EcosySTEM - \$99,499
- STEMx for EcosySTEM- \$12,320
- Best Buy for Botball - \$10,000
- US Bank for Computer Science for devices - \$2,500
- Rocky Mountain Power Foundation for \$3,000 for i-STEM
- Multiple other grants submitted and/or in progress: Office of Naval Research, NSF grants, Murdock Foundation, Amgen Foundation



GOAL 2: Align STEM education and workforce needs throughout Idaho

STEM AC Foundation Update

- \$137,000 raised in FY21 to-date
- First Audit Fall 2020
- New Board Member; Seeking Northern Idaho BOD Member(s)
- Special Partnership - Idaho Codes Impact



- Amazon Smiles, Fred Meyer Community Rewards



FY20 Support Growth

Through P3, New Program Sponsors, Stronger Partners
P3, New Sponsors, Stronger Partners

FY2019 Funds Raised	FY2020 Funds Raised
\$504,188	\$824,002

- Idaho National Laboratory – \$319,000
- Micron Technology Foundation – \$146,000
- Laura Moore Cunningham Foundation – \$50,000
- J.R. Simplot Company Foundation – \$50,000
- Acahand Foundation – \$50,000
- Power Foundation – \$29,000
- Idaho Community Foundation – \$25,000
- J.A. & Kathryn Albertson Foundation – \$25,000
- Individual donors – \$14,000



GOAL 2: Align STEM education and workforce needs throughout Idaho

Donor Totals for FY21 = ~\$344,000

- **Laura Moore Cunningham Foundation** **\$65,000**
- **Office of the State Board of Ed (GEER)** **\$98,000**
- **Workforce Development Council** **\$54,000**
- **Office of the Governor (COVID-19)** **\$26,000**
- **Albertsons Safeway** **\$25,000**
- **FIRST** **\$20,000**
- **Micron Technology Foundation*** **\$20,000**

* Transfer from Foundation to Center in progress; not included in total



GOAL 2: Align STEM education and workforce needs throughout Idaho

Top Donor Programs in FY21

• Educator PD	\$160,000
• Externships	\$29,250
• i-STEM	\$3,000
• INDEEDS Award	\$3,000
• Public-Private Partnerships	\$157,000
• Competitions	\$7,000



GOAL 3: Increase awareness of the importance of STEM throughout Idaho

Upcoming Awareness Events: Idaho Library Conference, National Ecosystem Convening and Presentation, ION Power Up STEM Expo (virtual), DevCon Conference (Clearwater), and Idaho School Boards Association Conference, Idaho Technology Council Hall of Fame (INDEEDS Awards), Boise Startup Week



Media Coverage:

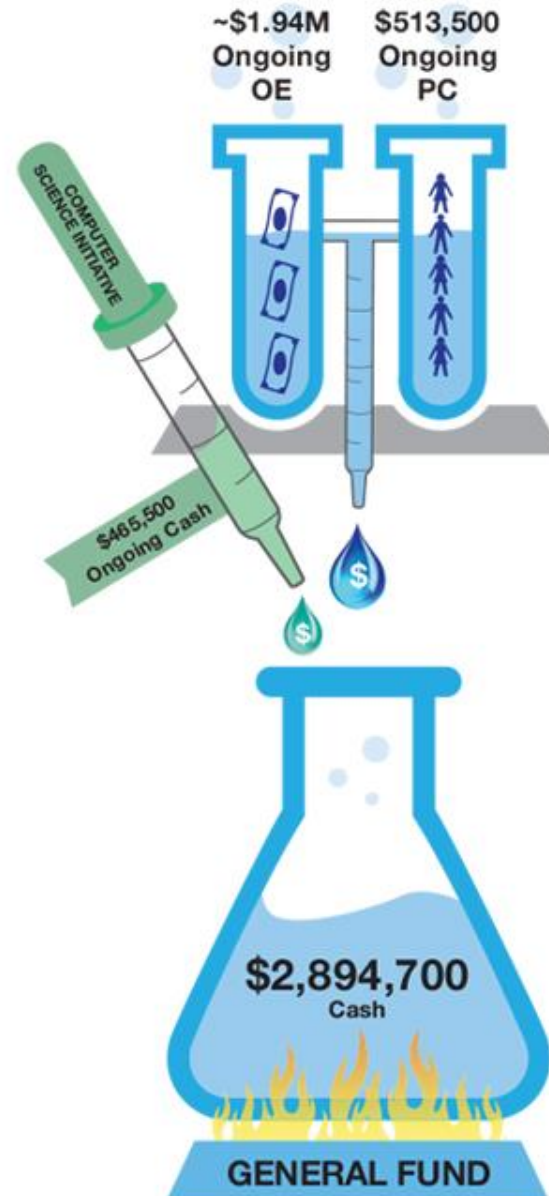
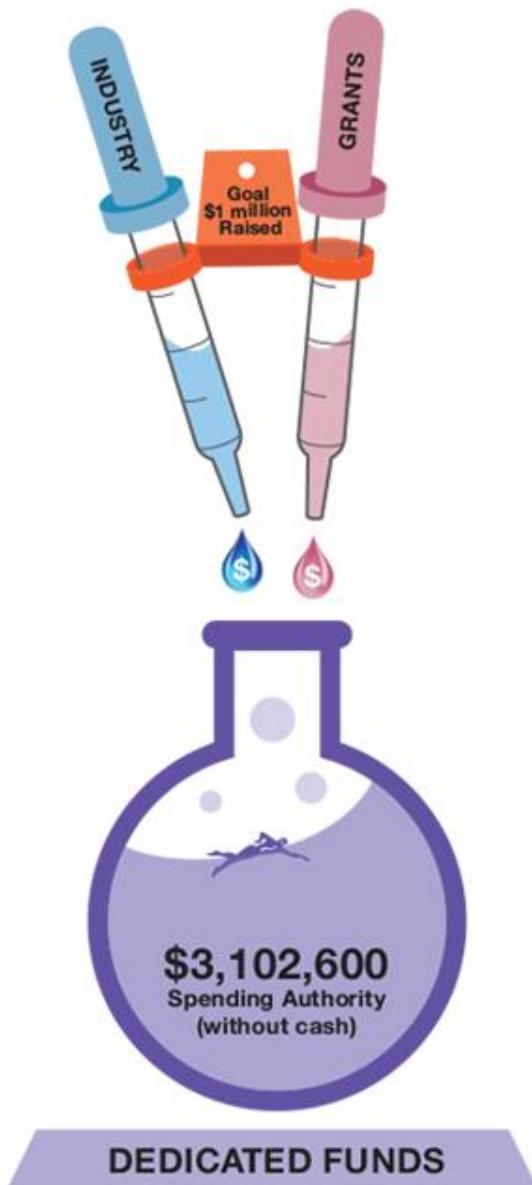
STEM@Home, Boise Start Up Week, EcosySTEM NSF Grant, Externships

BUDGET DISCUSSION

**Present (FY21) &
Future (FY22)**



FY21 Appropriation: \$5,997,300



Analysis by Project – FY20 and FY21

BY GOAL			
	FY20 – Proposed (Aug 2019)	FY20 –Actual (June 2020)	FY21 – Proposed (July 2020)
GOAL 1: Grants	7%	10%	6%
GOAL 1: PD	27%	25%	26%
GOAL 2: Sponsorships (Competitions + student travel, , Events, P3 and Sponsorships, Mentorship, workforce programs, externships, STEM schools, ecosystems support, pilot projects)	45%	40%	41%
GOAL 3: Outreach/Awareness Activities	11%	13%	14%
Operating Expenses (office + software, contractors, travel, memberships, infrastructure)	9%	11%	12%

FY22 Budget Request

- Budget request submitted end of August
- Revisions in progress
- Current request includes:
 - Maintenance items (change in benefit costs, IT billings, etc.)
 - Line item to move 1 FTE from STEM Ed Fund to General Fund
- Request breakdown:
 - General Fund: \$3,045,700 (cash and spending authority)
 - STEM Ed Fund: \$2,929,900 (spending authority only)
 - Total: \$5,975,600



Legislation for 2021 Session

- Currently NO proposed legislation
- Ideas/Needs from the Board?



Required Documents STEM AC

FY20 Performance Report and Strategic Plan



Idaho STEM AC Statutes

- **Idaho Code 67-823:** Established the Idaho STEM Action Center
- **Idaho Code 33-1633:** Computer Science Initiative
- **Idaho Code 67-824:** Established the STEM Education Fund
- **Idaho Code 33-4701:** STEM School Designation
- **Idaho Code 33-1634:** Computer Science for All
- **Idaho Code 33-523:** Established a STEM Diploma
- **Idaho Code 63-3029A:** Established STEM AC as an Idaho Education Tax Credit



Mission and Vision

- **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



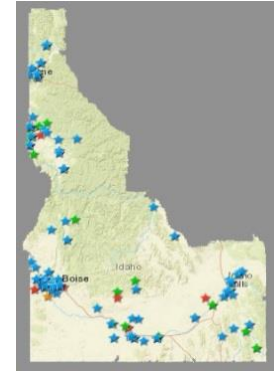
Goals

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



FY20 Performance Report Data

[Data Map Link](#)



	FY16	FY17	FY18	FY19	FY20
Student Engagements	10,428	204,000	406,239	442,318	164,687
Educators Interactions	1,200	4,800	12,633	35,768	22,369
Community STEM Events	45	140	143	288	250
Cash	\$72,000	\$205,000	\$750,500	\$1,346,800	\$1.746M
In-Kind (and cash equivalent)	Did not track	\$662,000	\$1,787,400	\$4,446,500	\$4,884,000

2021 Session

- What do you need to talk with partners about our work?
- Who needs to know, buy or believe in our work?
- Who we are, what we do, how we do it and why it matters
- Other Ideas/Needs from the Board?



Public Comment



Support Needed To Cultivate Additional Public-Private Partnerships

- Please continue to introduce us to individuals, businesses or companies that have a common mission/vision for STEM education
- Public-Private Partnership Application is opening mid-July



Areas You Can Support

Messaging

- Introductions to STEM Supporters
- Volunteer Recruitment via STEM AC Webpage
- Follow us on Social Media (or share)



'THIS IS STEM' Video



Other Upcoming Events

Idaho Technology Council Hall of Fame Gala

INDEEDS Awards

October 27, 5:30-7pm

Idaho EcosySTEM

Strategic Planning Statewide Meeting

October 30, 2020

Next Board Meeting:

Thursday January 7, 2020 - Virtual

January 14, 2021

TBD: STEM Matters at the Capitol



Take the Survey

Sign up to
participate in
our Oct. 30
Convening

- **SURVEY:**

- <https://www.surveymonkey.com/r/QFYLLKZ>

- **October 30 Convening:**

- Register here:
https://docs.google.com/forms/d/e/1FAIpQLSf3vZL-hb8MQU8htzZ2QcPfOKoIgrgIvyP48KLbemTKykEu_w/viewform

