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

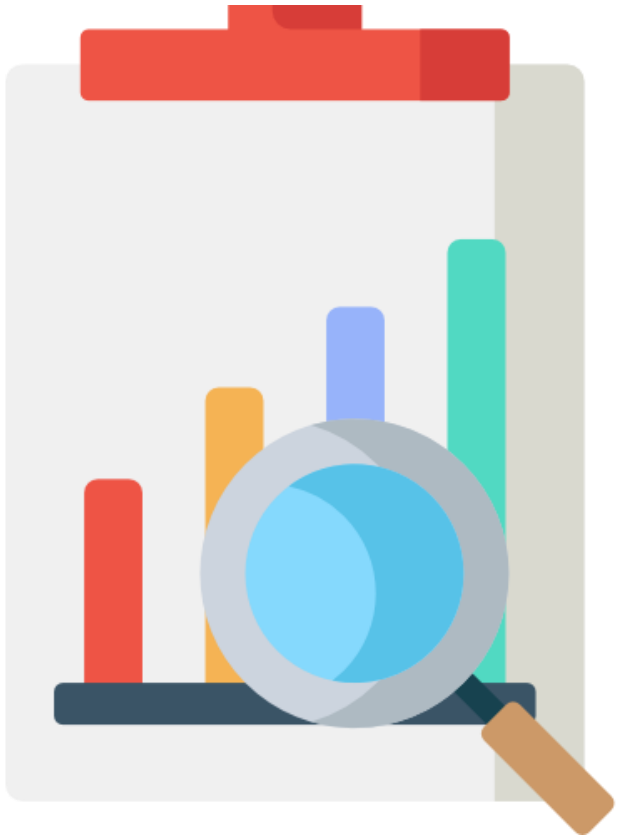
STEM Ecosystem Strategic Planning Meetings and Partners

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



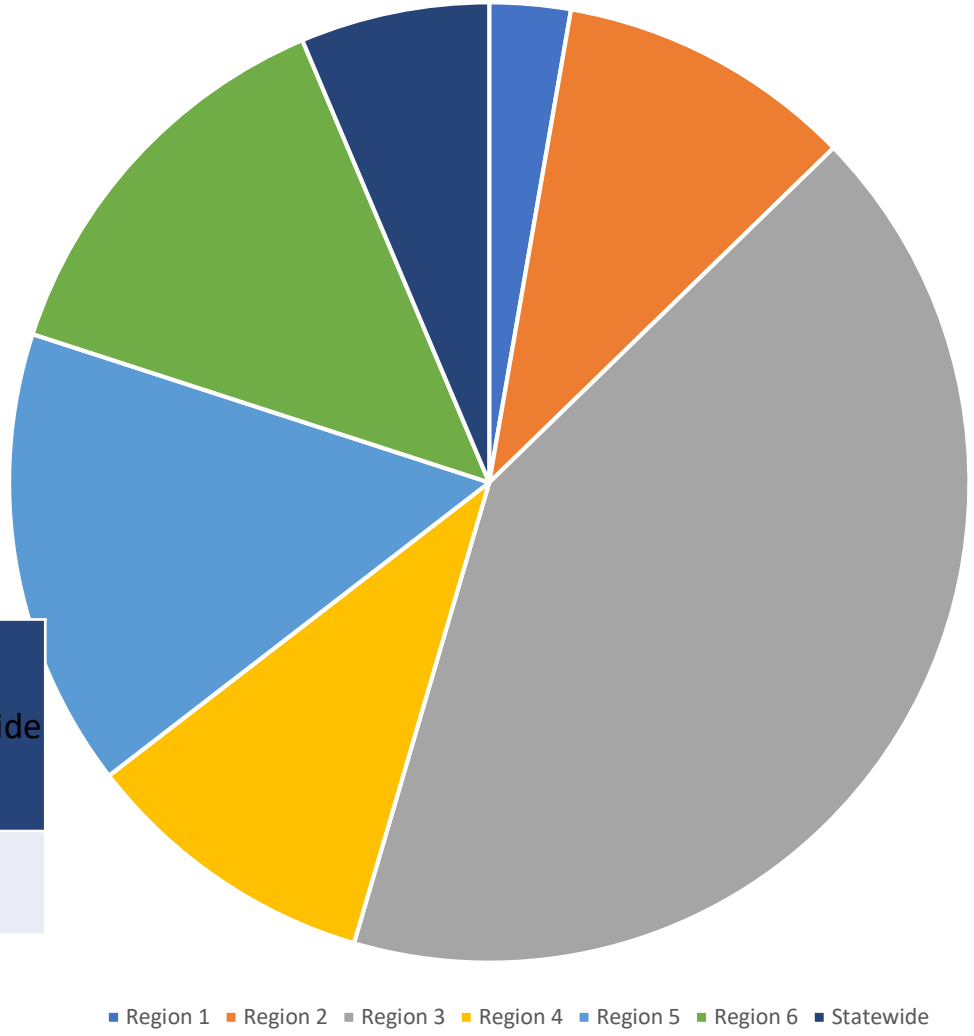
IDAHO ECOSYSTEM

IDAHO STEM ACTION CENTER

Who gave input?

In which geographic region is your organization located?

Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Statewide
3%	10%	42%	10%	15%	14%	6%



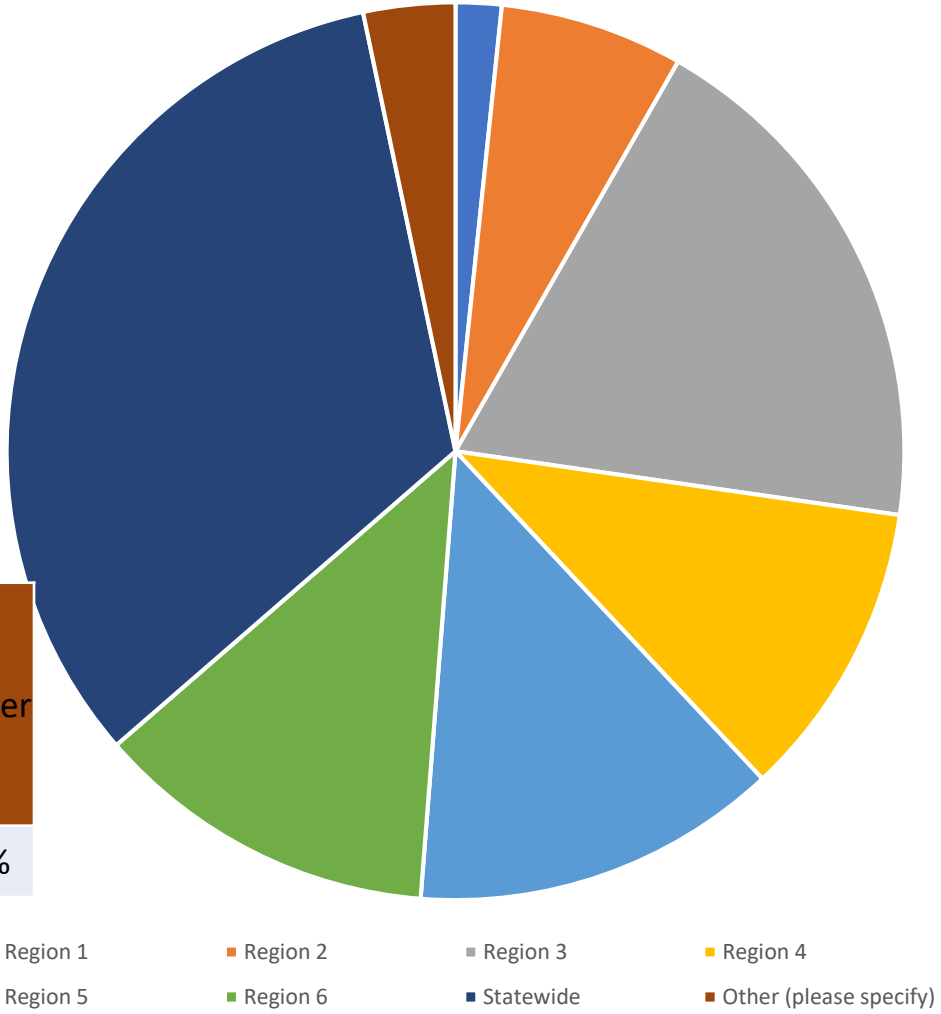
IDAHO ECOSYSTEM

IDAHO STEM ACTION CENTER

Who gave input?

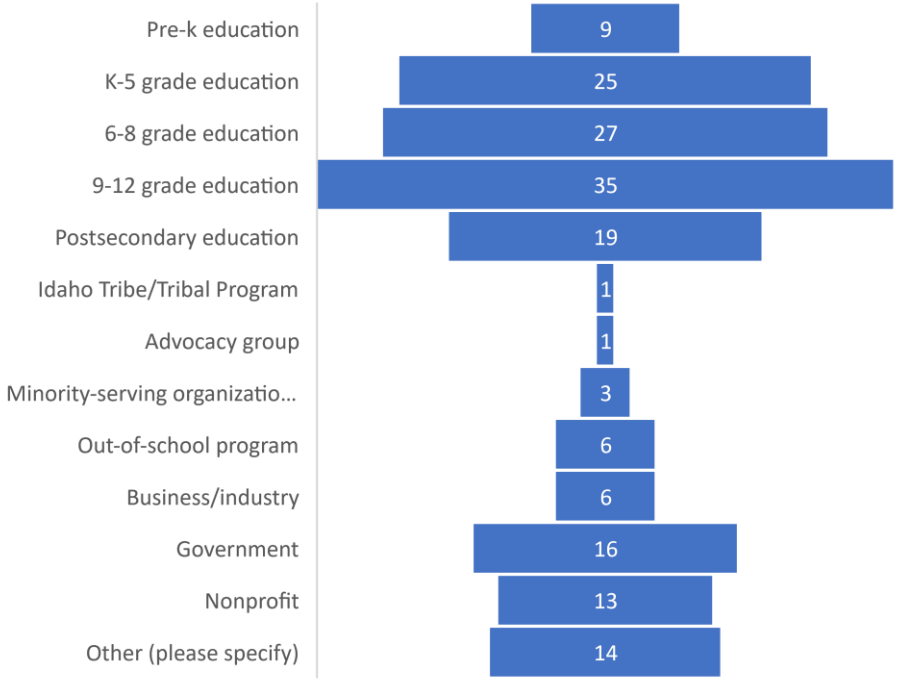
Which geographic region(s) does your organization serve?

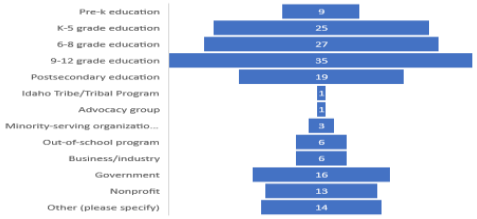
Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Statewide	Other
2%	7%	21%	12%	15%	14%	36%	4%



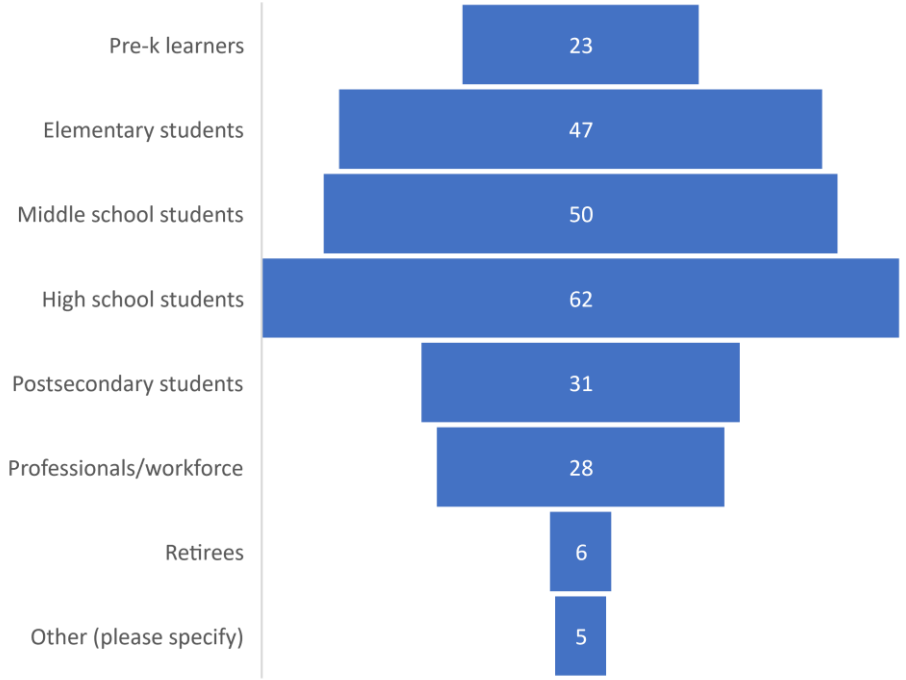
Who gave input?

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%

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

I coordinate STEM programming with our students
INL On Semico Idaho State University
Future Citi Science Ol Boise State University
Oneida County Library
Local Farm 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

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

I coordinate STEM programming with our students
INL On Semico Idaho State University
Future Citi Science Ol Boise State University
Oneida County Library
Local Farm 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

Salmon Pu Computer Zen
Idaho Stat INL
I don't thin Idaho STE Some colla boratin here or there with PCSEdventrues.
school dist public libra stem related industries
Burley Pub Cassia County School District
All college High Schools
School Dis Public Libr Economic Development Organization
Idaho Scie Idaho STEM Action Center
Stem actio micron

Local Agrit Agriculture Science Program
STEM Action Center
Century 2 Library
IR Simplot Elementary School
STEM Action Center
univerity 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 Hailey Pub Community Library

College he High School Health programs

Tribes University of Idaho
STEM Acti Micron

My community knows what STEM **means**.	My community shows **interest** in STEM.	My community **values** STEM skills.	STEM **careers** are available in my community.	My community understands that STEM is important to its **long-term** 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

IDAHO ECOSYSTEM

IDAHO STEM ACTION CENTER

My community has available **infrastructure** to support STEM opportunities .	My community has **technology** available to support STEM opportunities.	My community has **funding** available to support STEM opportunities.	My community has **human power** available to support STEM opportunities.	My community has **leadership** 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

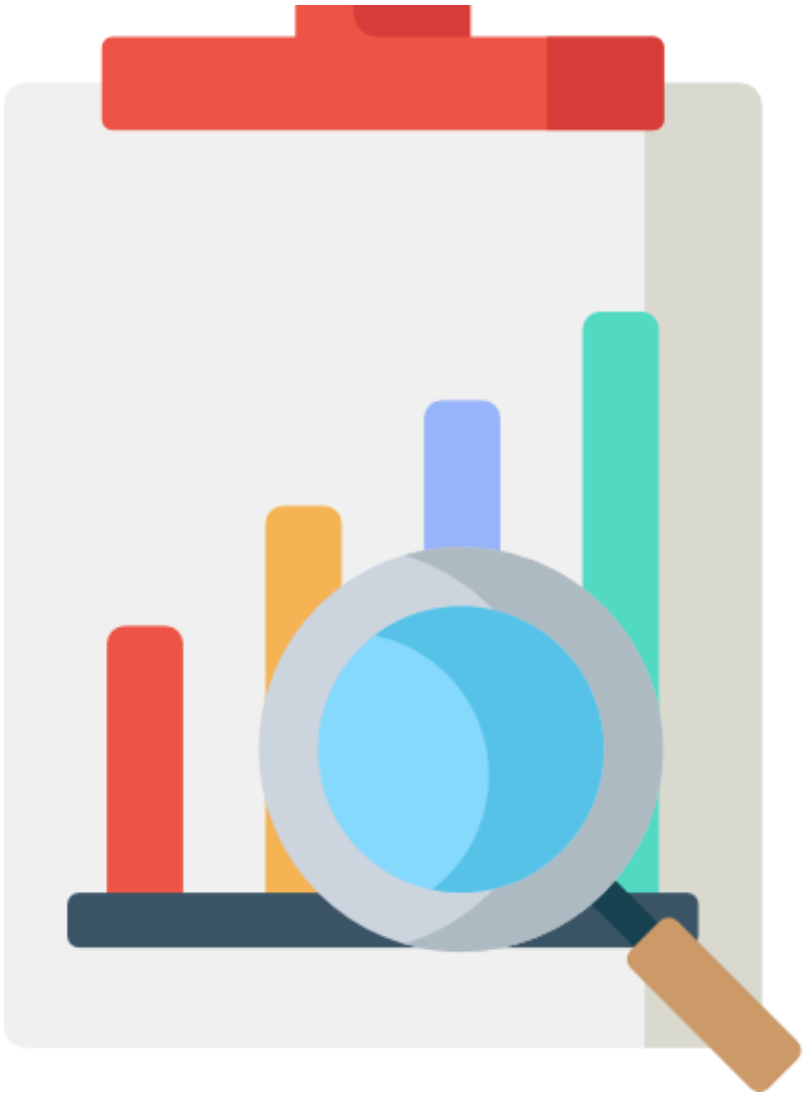
IDAHO ECOSYSTEM

IDAHO STEM ACTION CENTER

SURVEY DATA PRESENTATION

Regional Qualitative

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



IDAHO ECOSYSTEM

IDAHO STEM ACTION CENTER

Defining community

Regions 1 & 2	Regions 3 & 4	Regions 5 & 6
• Rural • Remote • Agricultural • Tribal presence • Strong connections to land • Mixed industry, largely featuring forestry and agriculture	• Statewide/regional- big, diverse population • Specific industry focus/gov agencies • Local- peripheral rural communities • Hispanic populations • Low SES populations	• Rural • Remote • Agricultural • Hispanic/Indigenous populations • Socioeconomic divides create/reinforce educational divides

Resources

Regions 1 & 2	Regions 3 & 4	Regions 5 & 6
Available • Specific programs • Higher education networks **Missing** • Funding • Coordination; Connection between industry & education • Interest & awareness, especially for families	**Available** • Volunteers • Funding • Training Opportunities • Venues **Missing** • Ongoing Funding • Staffing • Resources • Leadership • Access & inequity • Awareness • Training • Time	**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	Regions 3 & 4	Regions 5 & 6
• Specific programs or events • Shared resources • Funding • Limited/none	• Events • Trainings • Outreach and Collaborations • Provide volunteers and/or mentors • Share resources • Provide funding	• Events • Extracurriculars • Funding • Volunteers • Limited/None

Achievements

Regions 1 & 2	Regions 3 & 4	Regions 5 & 6
• Specific programs • Placemaking (i.e. makerspace)	• 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	• Very successful events • Establishing new competition teams • ISU invests in STEM

Measures of success

Regions 1 & 2	Regions 3 & 4	Regions 5 & 6
• Headcounts • Surveys • Fluency in program materials	• Surveys • Participants counts • Measure/track GO ON rates • Number of projects completed • Number of partnerships • Funding received • Outreach activities • Resources provided	• Headcount/enrollment • Surveys • Certification/go-on rate/other standardized metrics

Regulatory/Policy needs

Regions 1 & 2	Regions 3 & 4	Regions 5 & 6
Organization • Guidance from policymakers • Unknown **Community** • Industry guidance • Internet access	**Organization** • Unknown • State rules/legislation • School Policies • Liability • Accreditation **Community** • Unknown • Funding (state and federal) • Specific demographic needs	**Organization** • Guidance from policymakers • Unknown **Community** • Industry guidance • Internet access

Barriers to success

Regions 1 & 2	Regions 3 & 4	Regions 5 & 6
• Funding • Cultural barriers • Lack of devices/tech support	• Lack of funding • Lack of equitable access • COVID-19 • Lack of awareness/outreach needed • Lack of time • Politics	• Barriers to participation (transportation, language, registration fees, etc) • Cultural attitudes toward STEM • Geography

Equity approaches & needs

Regions 1 & 2	Regions 3 & 4	Regions 5 & 6
Approach Taken • Target demographics • Reduce barriers to entry (free to participate, hotspots, etc) **Supports Needed** • Funding • Communication	**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	**Approach Taken** • Free/reduced cost programming • Partnerships • Population is largely underrepresented **Supports Needed** • Cultural shifts • Guidelines on best practice, policy, etc

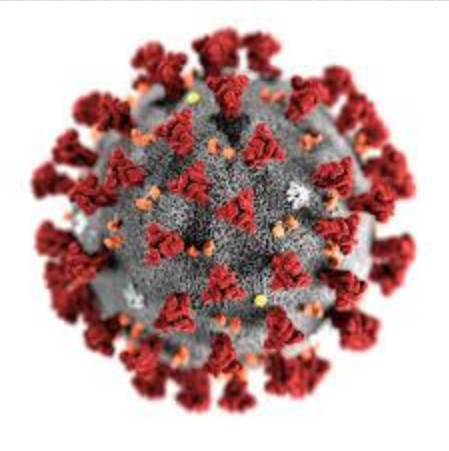
Take the Survey

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



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

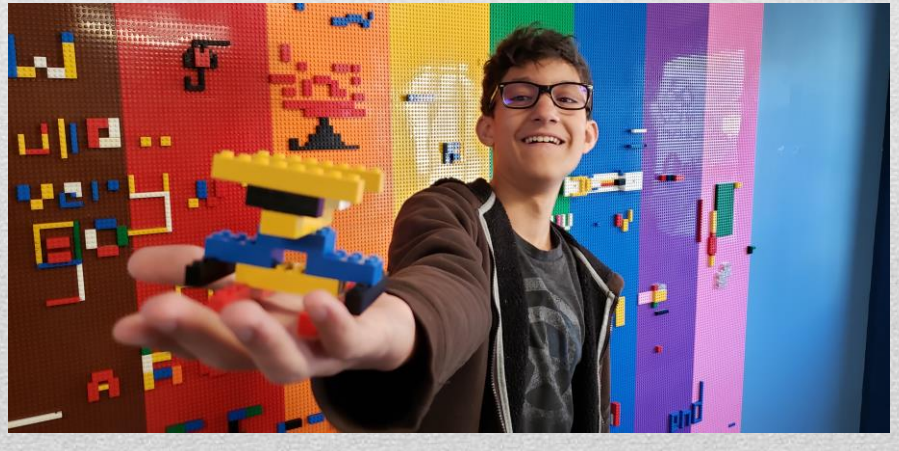
- Idaho Code: 33-4701
- Schools can apply anytime, but onsite reviews typically occur in the fall; leads to STEM Certification
- November – School Visits and Certification
- January – Approval by STEM AC Board
- February – Approval by OSBE Board leads to STEM Designation
- Recognition of STEM Designation 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

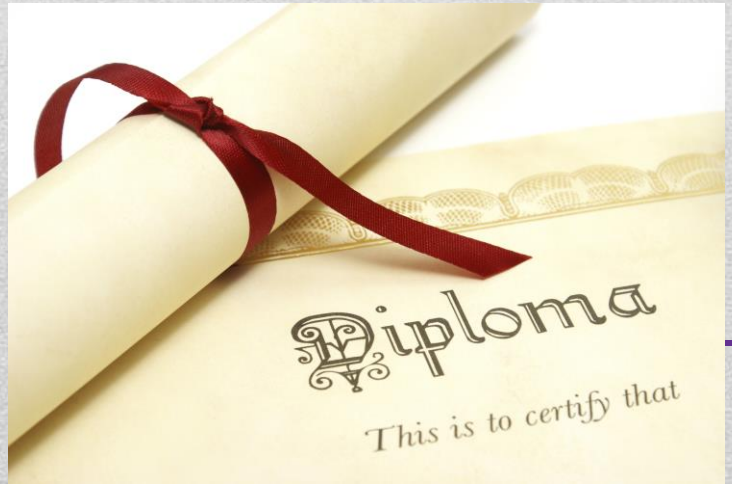
Updated STEM Designation Framework from Cognia

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



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

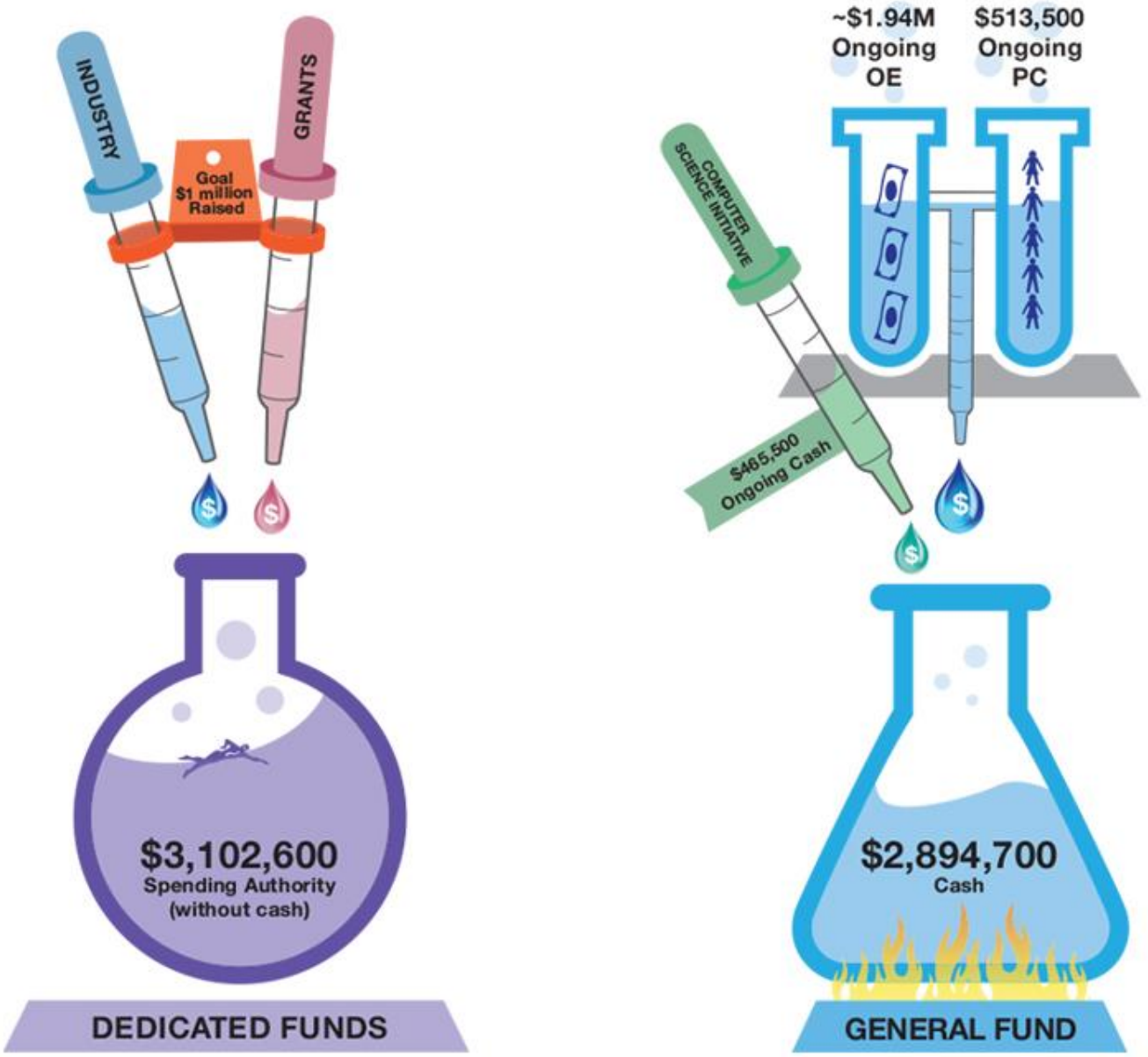
Media Coverage:

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

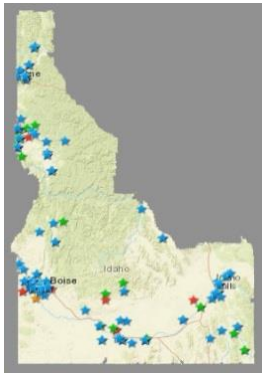
- **VISION**: A diverse, equitable, thriving ecosystem for a prosperous, STEM-literate Idaho

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

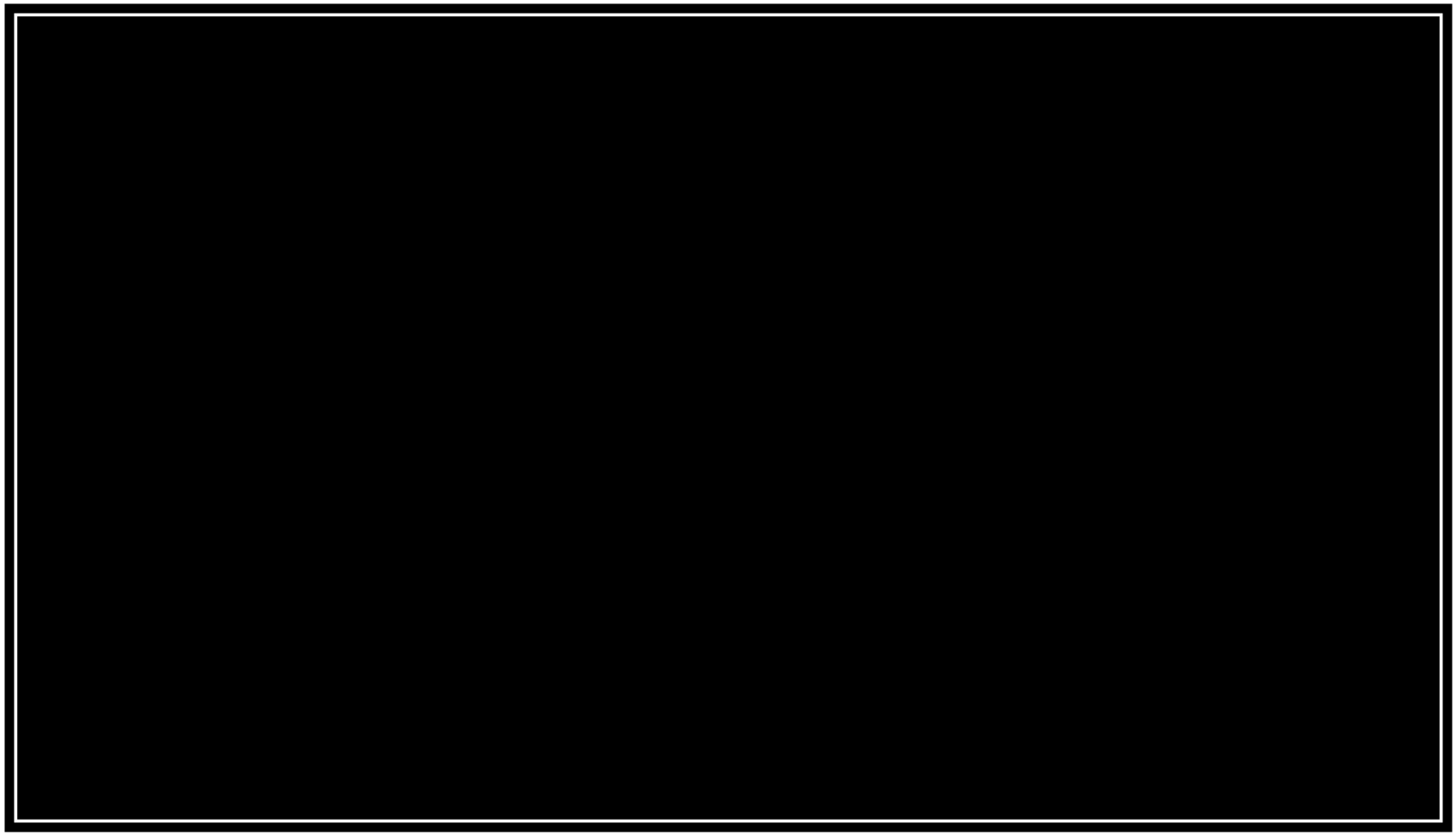
Messaging

-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