Board Meeting
Nov. 5, 2019

Chobani
9:30 - 3:30 pm
STEM AC Strategic Goals

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

2. **Align** education and workforce needs throughout Idaho

3. Increase **awareness** of the importance of STEM throughout Idaho
GOAL 1: Advance equitable access

- Grants:
  - PK12 Awarded
  - Family STEM

- i-STEM Update
  - Partnerships with: SDE, H&W + industry sponsors

- STEM Leadership
  - Training with OSBE

- Competitions
  - Junior Botball & Botball
  - eCYBERMISSION Program
  - Idaho Exhibition of Ideas (formerly FabSLAM)
  - MakerMinded
  - ISEF

- INDEEDS Awards
  - Industries Excellent Educators Dedicated to STEM (next slide)
2019 INDEEDS Winners

Lynette Leonard
Librarian at Southside Elementary, Cocolalla
Literacy, Technology Coding Educator
Day Camp Program Director for the Inland Northwest Council, Boy Scouts, Master Naturalist and (SOLE)Selkirk Outdoor Leadership & Education.

Robin Wilson
Emmett High School, Emmett
Biology and Chemistry Educator
Science Department Chair
Biology Club, Professional Biologist managing regional, statewide, and national programs in Nevada
INDEEDS 2019 Donors

Platinum Partners ($5,000)

- Idaho National Laboratory
- VYNYL

Gold Partners ($2,500)

- Micron Foundation

Silver Partners ($1,500)

- Discovery Center of Idaho
- Idaho Power

Bronze Partners ($750)

- Trailhead
GOAL 2: Align education and workforce
Governor’s Summit Recap

Attached: Burning Glass Keynote

Links to summit presentations
- Age of Agility 2019 – Dr. David Pate: The Reality of Work - https://youtu.be/L0unnaP36-Y
- Age of Agility 2019 Governor Brad Little Keynote Address - https://youtu.be/BdGRoZk9858
- Age of Agility 2019 Idaho’s Future - https://youtu.be/B8PF9xW6LMU
Goal 2: Align STEM education and workforce

**Teacher Externships**

- Teachers worked 5 weeks in businesses
- Total Cost = $80,000
- WDC Grant = $55,000
- Idaho Power = $2,500
- At least 25 business asking for externs for summer 2020
GOAL 2: Align STEM education and workforce

Externship Update

• 10/1-12/31 Application Open for Businesses
• 1/1-2/7 Application Open for Externs
• 2/8-2/14
  o Apps reviewed by STEM AC/WDC
  o Potential candidates forwarded to businesses
• 2/15-3/30 Candidates Interview with Businesses
• By 4/1 Candidates Offered Externships
STEM Designated School (§33-4701)  
2019 – 2023  
Cost: $40,000

- 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

- STEM Diploma option (§33-523)
GOAL 2: Align STEM education and workforce

STEM School Designation Timeline

- Idaho Code: 33-4401
- Schools can apply anytime, but onsite reviews typically occur in the fall; leads to STEM Certification
- November 2019 – School Visits and Certification
- January 2020 – Approval by STEM AC Board
- February 2020 – Approval by OSBE Board leads to STEM Designation
- Recognition of STEM Designation during legislative session
- Recognition Events at Schools in the Spring
GOAL 2: Align STEM education and workforce
Current Applicants for Certification

- Southside Elementary (K-6)
  - Cocolalla
  - Scheduled Onsite Review: 11/10-12
- N. Idaho STEM Charter Academy (K-12)
  - Rathdrum
  - Scheduled Onsite Review: 11/12-14
STEM Ecosystem Application & Statewide Partners

- STEM Learning Ecosystem Community of Practice – Accepted into Cohort 6!!
- STEMx Planning Grant
- NSF Development Grant
- Templates: White House STEM Strategic Plan (handout of progress update); STEM Vision 2026
GOAL 2: Align STEM education with workforce needs throughout Idaho: GRANTS

- Army Education Outreach Program (AEOP) Grant for eCYBERMISSION program - $50,000
- US2020 Coalition - $25,000
- Laura Moore Cunningham Foundation - $50,000
- Workforce Development Council - $50,000
- Best Buy - $10,000 (Check presentation Nov. 1)
- STEMx - $12,000
- Awarded PK12 and Family STEM/Career Event
GOAL 2: Align STEM education & workforce needs throughout Idaho

STEM AC Foundation Update

• $283,977 raised in FY20 to date
• Giving Tuesday Dec. 3rd
• Year-end Campaign
GOAL 2: Align STEM education & workforce needs throughout Idaho

**STEM AC Foundation Update**

**New Partnerships**

- Annual Gift to Support Women in Computer Science Awards
- Industry Partners
  - Public-Private-Partnership “P3”
  - Student Competition Sponsorships
  - Time & Talent
Foundation Board Expansion

Southwestern Idaho

Nick Aldinger  
*Owner*  
Idaho Business League Events  
Meridian, Idaho

Eastern Idaho

Molly Prickett  
*Senior Environmental Engineer*  
Bayer  
Soda Springs, Idaho
GOAL 2: Align STEM education & workforce

Funds Raised in FY20 = $655,000

- Idaho National Laboratory – $113,000
- Micron Technology Foundation – $112,000
- Battelle – $63,000
- JR Simplot Company Foundation – $50,000
- Citizen Schools – $26,000
- Power Foundation – $20,000
- Cradlepoint – $10,000
GOAL 2: Align STEM education & workforce

Top Donor Programs in FY20

- Public-Private Partnerships – $390,000
- Professional Development – $87,000
  - INDEEDS – $11,000
  - i-STEM – $5,000
- Externships – $57,500
- Competitions – $75,000
- INDEEDS Award – $11,000
- STEMx – $12,000
Total In-Kind Donations, FY20

$1.25M

Includes grant reviewers, competition judges, training room space, mentors, industry partnerships, and media coverage
Board Selection Process Discussion

**Elections:**

- Roles and Responsibilities of Chair and Vice Chair
- Terms of Service for Chair and Vice Chair
- Length of Term
- Other items we should consider?
- Should this match the Foundation Terms?
- Motion on Terms today or revisit in January?
Legislative Preparation

• What types of conversation do you navigate?
• Suggestions on helpful resources?
  o STEM Statutes
  o STEM AC Goals
  o STEM AC Strategic Plan and Performance Report
  o Budget and Future Projections
  o Budget Analysis by Goal
  o Talking Points STEM and CS, 2019 (attachment)
  o Project Impact, (attachment)
  o Mentorship, Externship, MakerMinded (attachment)
  o Bright Spots, 2019 (attachments)
  o Others?
Idaho STEM Statutes

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

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

2. **Align** education and workforce needs throughout Idaho

3. Increase **awareness** of the importance of STEM throughout Idaho
## GOAL 3: Increase awareness of the importance of STEM

### Strategic Plan

### Performance Report Metrics

<table>
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<tr>
<th></th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
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</thead>
<tbody>
<tr>
<td><strong>Student Engagements</strong></td>
<td>10,428</td>
<td>204,000</td>
<td>406,239</td>
<td>442,318</td>
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<td><strong>Educators Interactions</strong></td>
<td>1,200</td>
<td>4,800</td>
<td>12,633</td>
<td>35,768</td>
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<td><strong>Community STEM Events</strong></td>
<td>45</td>
<td>140</td>
<td>143</td>
<td>288</td>
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<tr>
<td><strong>Cash</strong></td>
<td>$72,000</td>
<td>$205,000</td>
<td>$750,500</td>
<td>$1,346,800</td>
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<td><strong>In-Kind Donations</strong></td>
<td>Did not track</td>
<td>$662,000</td>
<td>$1,787,400</td>
<td>$4,446,500</td>
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FY20 Appropriation
$4,695,800*

$1 million One-Time

$2,006,200 Spending Authority

DEDICATED FUNDS

~$2.08M Ongoing
Personnel Cost $507,400

$2,589,600
GENERAL FUND
STEM and Idaho’s Economy

In 2018, 6,328 STEM JOBS WERE UNFULLED IN IDAHO, resulting in nearly $413 Million of unclaimed personal income.

Idaho’s STEM jobs PAY WELL, DOUBLE THE MEDIAN WAGE of non-STEM JOBS.

If these STEM JOBS were filled, state tax revenues would INCREASE BY OVER $22 Million.
2018 (actual)
- 6,328 unfilled STEM jobs
- $412 million in lost personal income
- $22.4 million in lost tax revenue

2024 (predicted)
- ~100,000 available STEM jobs
- $350 million in tax revenue
- $6.5 billion in personal income from Idaho’s STEM economy

Actual STEM Tech Sector Growth 2004-2014
- 11.3% U.S.
- 0.4% ID

Predicted STEM Tech Sector Growth 2014-2024
- 8.8% U.S.
- 26.0% ID
## Budget Analysis by Goal

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<tbody>
<tr>
<td><strong>GOAL 1 High-Quality Opportunities: STEM+CS Grants</strong></td>
<td>16%</td>
<td>12%</td>
<td>7%</td>
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<tr>
<td><strong>GOAL 1 High-Quality Opportunities: STEM+CS Professional Development</strong></td>
<td>28%</td>
<td>26%</td>
<td>27%</td>
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<tr>
<td><strong>GOAL 2 Education to Workforce:</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>(Competitions, Externships, P3 and Sponsorships, Mentorship, Scholarships, Workforce Programs, STEM Schools, Pilot Projects)</td>
<td>39%</td>
<td>42%</td>
<td>45%</td>
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<tr>
<td><strong>GOAL 3 Outreach/Awareness Activities</strong></td>
<td>5%</td>
<td>5%</td>
<td>11%</td>
</tr>
<tr>
<td><strong>Operating Expenses (office, supplies, software, contractors, travel, memberships)</strong></td>
<td>12%</td>
<td>14%</td>
<td>9%</td>
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Legislation for 2020 Session

- Currently NO proposed legislation
- Ideas/Needs from the Board?
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
• Volunteer recruitment to hub
• Public-Private Partnership opportunities
Goal 3 Increase Awareness:

Upcoming STEM AC Events

Hour of Code
Dec 9 – 15, 2019

STEM Matters!
Day at the Capitol
January 15, 2020

STEM on the Blue
April 24, 2020
Public Comment
Next Board Meeting:
January 10, 1:00 pm – 4:00 pm
WW-17 in the Capitol