Table Talk
The Future of Idaho Education is Access to a Robust Education, Including STEM

In 2018, 6,328 STEM JOBS WERE UNFILLED 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

IDAHOSTEM ACTION CENTER
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Facts About Idaho Jobs

Idahoworks.gov has over 27,500 job openings with 6,500 that are hard-to-fill, open for 90+ days.

Idaho has the fastest population growth, the 3rd fastest job growth, and 2nd fastest tech sector growth, 1st in wage growth.

100% of Idaho industry believe employees should possess both technical and 21st century skills.
A diverse, equitable, thriving ecosystem for a prosperous, STEM-literate Idaho

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

Idaho STEM Action Center
Can you start my STEM Action Center?
As Legislated in Idaho Code

- Competitions
- STEM Diploma
- Grants
- Resource Center
- STEM Schools Designation
- PD
- Engage Industry

Under Represented
Wow! Libraries are so much more than books!
Many issues simply cannot be solved through formal education alone.
STEM AC 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
21st Century Skill Development
$1M cash reduction for CS starting July 1, 2019

$1 million One-Time ($33-1633)

$2,006,200 Spending Authority

DEDICATED FUNDS

$2,589,600

GENERAL FUND

~$2.08M Ongoing ($67-823)
Personnel Cost $507,400

*Includes $100,000 in miscellaneous spending authority
Salmon Public Library
“Unfortunately, the education system in Idaho hasn’t kept up with the human capital demands of local industry, forcing companies to expand elsewhere.”
STEM PD for ALL
Our Impact in CS – 2nd in the Nation!

- Idaho has created a state plan for K-12 computer science.
- Idaho has established K-12 computer science standards.
- Idaho has allocated funding for rigorous computer science PD and course support.
- Idaho has clear certification pathways for computer science teachers.
- Idaho has a dedicated computer science position in the state education agency.
- Idaho has established programs at institutions of higher education to offer computer science to preservice teachers.
- Idaho requires that all secondary schools offer computer science.
- Idaho allows computer science to count for a core graduation requirement.
- Idaho allows computer science to count as a core admission requirement at institutions of higher education.
Percentage of Women and Men in ALL Jobs vs STEM Jobs

- All jobs: 52% Men, 48% Women
- STEM jobs: 76% Men, 24% Women
# How Do Real-World Examples Change Girls’ Perceptions of STEM?

**Girls, Grades 5-12**

<table>
<thead>
<tr>
<th>Profession</th>
<th>Gets to be creative at their job</th>
<th>Has a job that does good things for the world</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How would you describe a COMPUTER SCIENTIST?</strong></td>
<td>+17% (44% → 61%)</td>
<td>+33% (41% → 74%)</td>
</tr>
<tr>
<td><strong>How would you describe an ENGINEER?</strong></td>
<td>+14% (49% → 63%)</td>
<td>+28% (46% → 74%)</td>
</tr>
<tr>
<td><strong>How would you describe a MATHEMATICIAN?</strong></td>
<td>+24% (19% → 43%)</td>
<td>+32% (25% → 57%)</td>
</tr>
</tbody>
</table>

[Colors and icons for Before Examples, After Examples, and +/- Change]
What is the Benefit of STEM Learning Outside of the Classroom?

Girls, Grades 5-12

Feel powerful doing STEM activities
- Girls who ARE in STEM clubs/activities: 77%
- Girls who are NOT in STEM clubs/activities: 34%

Understand how STEM is relevant and the jobs that are possible through STEM
- Girls who ARE in STEM clubs/activities: 75%
- Girls who are NOT in STEM clubs/activities: 53%

Know how to pursue a career in STEM
- Girls who ARE in STEM clubs/activities: 77%
- Girls who are NOT in STEM clubs/activities: 50%
What We Know
Family STEM/Career Awareness Events

**Students**
- 36% increase in awareness of STEM careers
- 83% want to study STEM in post-secondary
- 95% say STEM is fun!

**Parents**
- 92% believe their community should invest more in STEM
- 99% would like their child to pursue a STEM career
- 98% want their child to have access to a mentor
LITERACY for the 21st Century
## Our Impact in STEM

<table>
<thead>
<tr>
<th></th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
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<tbody>
<tr>
<td><strong>Student Engagements</strong></td>
<td>10,428</td>
<td>204,000</td>
<td>406,239</td>
</tr>
<tr>
<td><strong>Educator Interactions</strong></td>
<td>1,200</td>
<td>4,800</td>
<td>12,680</td>
</tr>
<tr>
<td><strong>Community STEM Events</strong></td>
<td>36</td>
<td>140</td>
<td>143</td>
</tr>
<tr>
<td><strong>Cash</strong></td>
<td>$72,000</td>
<td>$205,000</td>
<td>$736,938</td>
</tr>
<tr>
<td><strong>In-Kind</strong></td>
<td>Did not track</td>
<td>$662,000</td>
<td>$1,742,217</td>
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The STEM Action Center funded APPROXIMATELY 50% OF INCOMING REQUESTS due to current budget limitations.
Public Private Partnership – Matching-Funds

P3 may provide up to 50% match of funding secured by public institutions

- Partner A brings forth Funder B (i.e. business)
- Funder B provides $10K funds to STEM AC
- STEM AC provides $15K funds to Partner A
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