Board Meeting
March 7, 2016
Room WW17
1:00 - 4:00 pm
IDLA Portal
Welcome Sherawn Reberry
• Update and Discussion

Idaho Digital Learning Academy
Legislative Update

• Board Travel
• Tax Credit Legislation
• Computer Science Initiative
• STEM Education Fund
Board Travel – SB1249

• GOAL: Clarifies Board travel stipends
• STATUS:
  • Passed full Senate 35-0 on 2/18
  • In House Education this week
Tax Credit – HB 357

• GOAL: Allows STEM Action Center to obtain tax credit status

• STATUS:
  • Passed full House 66-4
  • Headed to Senate Local Government and Taxation Committee
Computer Science Initiative – HB 379

• GOAL: Establish the CS initiative for public schools

• STATUS:
  • Passed full House 66-2
  • Read in Senate Education and Referred to 14th Order for Amendment
  • Back on Senate Floor
  • Will then go back through full House
STEM Education Fund – SB 1279

• GOAL: Establish the STEM Education Fund
• STATUS:
  • Passed the full Senate 34-1
  • Headed to House Education Committee as of 2/24
STEM Action Center Budget Setting in JFAC

- Thursday, March 10th, 8am-10am
- JFAC Room, Idaho Capitol
501 c3 Status

- Idaho Science, Math and Technology Coalition (ISMTC) Discussion
- Leverage their status to obtain grants which can be overseen by the Center
Budget Updates - FY16

• i-STEM
  • Waiting to hear about funding related to the Math Science Partnership Grant
  • Looking into funding and the future without MSP
  • Propose: sponsor a session which will fund a BrickLAB Classroom Set for every educator who attends the session
  • Cost ~$7,700
Budget Updates - FY16

- **Khan Academy’s LearnStorm Sponsor**
  - Supported two $5,000 innovation grants which will provide devices to selected schools (we are reviewing grant applications now)
  - Supporting the finale event at Taco Bell Arena (details being finalized now)
  - Cost $5,000
• **Invent Idaho Sponsor**
  
  • Supported the regional competition at Jump and the State Competition (last weekend) at U of I. Provided small tokens of appreciation for judges and awards for winning students including Lego Robotics kits and SnapCircuit kits
  
  • Cost: $1,500
Budget Updates - FY16

- STEM Works and the rfp process
- Discussion and suggestions
December 2015

- 104 applicants with over $250,000 in need
- 23 grants of up to $2,500 awarded
Occurs March 14 – 16, 2016 at Discovery Center

- 65 applicants in one week
- 20 educators selected
Educators are eager to host Family STEM Events

- 45 applicants
- 20 will be selected
Grants and PD Updates

• FIRST FTC Regionals
  • March 30 – April 2nd, Taco Bell Arena

• FIRST Travel - $15,000
  • Supported 5 FRC teams to attend the Idaho Regional Event ($12,500)
  • Supported one FTC team who won the INSPIRE award and are headed to nationals ($1,250)
  • Support one FLL team who won state and is headed to nationals ($1,250)
Grant Updates

• State Board and CTE, Youth Skills Grant
• STEM Academy and Hearst Foundation
• Micron Foundation
• Tesoro Foundation
• MHSD and CS in XQ Super Schools Project Grant
• FIRST Community Grant
  • With Idaho After School Network, FIRST, Girl Scouts, BSU, ISU and STEM Idaho
• National Science Foundation Grant with BSU
  • Inclusion of Communities of Learners of Underrepresented Discoverers in Engineering and Science
• Also in discussion with Verizon, Idaho Power, AT&T & Cable One
• Have reached out to numerous other industries
• We have also applied for a few that we did not received
Pi Day FUNdraiser!!

STEM Matters & Pi Day FUNdraising Event

March 14, 2016 6:30 – 8:30 p.m.

Telaya Winery
240 E. 32nd St.
Garden City, Idaho 83714

at stem.idaho.gov
Donations Received for Pi Day

- STEMBusUSA – full-day school field trip valued at $4,500 and a Summer engineering camp gift certificate valued at $275
- BrickLAB – classroom set of building bricks from PCS Edventures! valued at $295
- 3D printer and filament package from STEMfinity valued at over $500
- Coiled Wine tasting, sampler, tour for six valued at $575
- Two TI Calculators valued at $240
- Date night for Two from KBOI valued at $100
- Various very cool 3D Printed models
Pi Day Support

FOR KIDS
- Would create a competitive grant and review process
- Summer STEM Camps for Kids, for example:
  - Discovery Center
  - Botanical Gardens
  - Robotics and Engineering Camps
  - YMCA
  - McCall Outdoor Science School

FOR EDUCATORS
- Summer Coding PD for educators with IDLA and Code.org
- Statewide Science and Engineering Fair
- Summer Robotics and Engineering Camps/PD
- i-STEM Engineering session
Computer Science Initiative Planning Group

• Group has been in existence for about 1 ½ years
• Made up of educators, administrators, SDE, the State Board, higher education, IDLA, STEM Action Center and industry (ITC, Zions)
• Provided the push, feedback and support for the of the CS Initiative
• Thoughts on asking if they would serve as an advisory group regarding the rollout of the CS legislation?
Strategic Planning and Long-Term Goals – Beginning Discussion

OC STEM Initiative

- Workforce Development
  - WIB Sector Forums
  - OC PATHWAYS

- Professional Development
  - Regional Innovation Support Provider Network (RISP)
  - Lead STEM Practitioners (LSP)
  - STEM Ecosystem Institute
  - Early Childhood STEM Symposium

- Communications Team
  - STEM Education Voice
  - STEM Data
  - Map STEM Programs
  - Support through Social Media Tools

- STEM Learning
  - APP JAM+
  - OC Science Fair
  - WATT
  - Maker Space
Metrics to Measure Outcomes/Impact

As Dictated in §67-823, the Center shall track and compare growth of students participating in Center activities to those that do not in the areas of:

• Number who are performing at grade level in STEM classes
• Student performance
• Graduation rates
• Number who graduate from Idaho and begin post-secondary programs
• Number that take STEM education courses at higher education institutions
• Number of educators receiving high-quality professional development
Additional Metrics to Develop

• Assessment subpopulations breakdown (ISAT, NAEP, SAT/ACT)
• Growth data in student growth percentile (SGP)
• Gap analyses including assessments (NAEP and ISAT) and industry
• Industry needs assessment including educators
• Work with State Board of Education regarding metrics of the STEM Statewide Strategic Plan
• Qualitative variables related to STEM Family Nights and Educator Grants (Intern and Northwest Education)
  o Student impact surveys including assessments
  o Pre- and post-surveys on STEM attitudes and STEM awareness
  o Communities of practice to share best practices
## Projects and Programs

$2M Ongoing, General Fund

<table>
<thead>
<tr>
<th>Amount</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>$100,000</td>
<td>• Conduct needs and gap analyses of industry and education</td>
</tr>
<tr>
<td></td>
<td>• STEM Action Center program evaluation</td>
</tr>
<tr>
<td>$275,000</td>
<td>• K-16 STEM education</td>
</tr>
<tr>
<td></td>
<td>• Coordinate workforce needs with K-16 STEM education</td>
</tr>
<tr>
<td>$150,000</td>
<td>• Database creation</td>
</tr>
<tr>
<td></td>
<td>• Professional development, competitions, grants, scholarships and resources for educators and workforce</td>
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**CUMULATIVE TOTAL: $525,000**
Projects and Programs
$2M Ongoing, General Fund

$500,000
• Support high-quality STEM professional development
• Support scholarships for STEM education or training

$250,000
• Support PK12 STEM grants for educators
• Includes resources and curricular materials

$100,000
• Support community STEM events
• Encourage community engagement and industry involvement

CUMULATIVE TOTAL: $1,375,000

FY 17, DU #1, LBB 6-121
Projects and Programs
$2M Ongoing, General Fund

$250,000
• Intel Science & Engineering Fair (Post-secondary & industry)
• Grant for students

$250,000
• National competitions
• FIRST Robotics, Invent Idaho, Science Olympiad
• Other competitions

$125,000
• Engage industry to support mentorship & internship programs
• Create actionable database connecting educators & industry

CUMULATIVE TOTAL: $2,000,000
Budget Updates - FY16

- Intel Science and Engineering Fair
  - Will partner with BSU, U of I, ISU, CSI and CWI – this will provide the venue and additional judges
- Will be hiring 2-3 part time (10hr/wk) contractors to cover each region
- Will reach out to industry for support of event through grants and the STEM Matters campaign
- Will begin plans to host professional development for educators and grants to students
- Nationals, May 8 – 13th in Phoenix, Az
  - Board attendance?
STEM Education Start-Up Fund
Investment in Idaho’s Future
Governor’s Recommendation, DU#6

- Demonstrates public sector commitment to development of STEM-prepared workforce and long-term economic stability
- Encourages industry participation and financial support
- Builds long-term partnerships
- Creates sustainability of programs
- $2M FY2017 spending authority
Idaho Ranks 49th in Women Earning Computer Science Degrees

Number of computing degrees/certificates in Idaho

Collaborate to Support Idaho Educators
DU#2, $2M Spending Authority

$250,000
Support CS endorsements and training through scholarships and incentives

$250,000
Support PD for educators
Support resources for schools through grants

$500,000
Support online CS resource portal
Support curricular materials linked to K-12 CS Standards
Support grants for software and devices

TOTAL: $1M

FY 17, DU #2 and #6, LBB 6-122
Collaborate to Support Idaho’s Workforce
DU#2, $2M Spending Authority

Work with Idaho’s Post-Secondary Institutions

- Develop CS training and courses for workforce
  - Workforce development such as providing scholarships for CS degrees
- Provide incentives for training including certificates & credentials
- Develop robust mentorship and internship programs
  - Work with industry & post-secondary to provide incentives for mentorship & internship programs

CUMULATIVE TOTAL: $2M
Program Manager for CS Initiative

Oversee all aspects of initiative including:

• Working with industry to gain support and sponsorships
• Working with higher education to develop courses for training both the new and existing workforce
• Working to develop robust mentorships and internship programs
• Working to develop PD and resources for educators
• Developing incentives for training resulting in certificate or credential

TOTAL: $99,000
Governor's Recommendations - FY17

- Industry Funds
- External Grants
- Annual Spending Authority
- Start Up Initiatives

- $10 Million
  - One-time funding for STEM education start-up fund

- $2 Million in FY17
  - Computer Science Initiative

- $2 Million General Funds
  - STEM Action Center

- Grants
- Professional Development
- Statewide Fair
- Scholarships
- Internships
- Online Resources
Topic Feedback
Ranked in order from SurveyMonkey

1) Computer Science & Portal Development - IDLA
2) Intel Science and Engineering Fair
3) Code.org and Computer Science
4) Microsoft IT Academy – SDE
5) Mastery Advancement Program – SDE
6) STEM Works as model for vetting STEM programs
7) FIRST Robotics
8) KISS Institute for Practical Robotics
9) Project Lead the Way
10) Million Women Mentors
11) NCLB vs ESSA
Public Comment
Upcoming Events

• March 10 – JFAC Budget Setting 8am-10am
• March 14 – Pi Day FUNdraiser, 6:30-8:30pm
• May 17 – Next Board Meeting, 1:00-4:00pm