

Board Meeting

March 7, 2016



IDAHO
STEM
ACTION CENTER

Room WW17

1:00 - 4:00 pm

IDLA Portal

Welcome Sherawn Reberry

- Update and Discussion

The screenshot shows the IDLA portal dashboard with a dark header and a grid of green tiles. The header includes the IDLA logo and the text 'Idaho Digital Learning'. The dashboard features a large image of a student using a laptop, and several tiles for navigation and resources.

Idaho Digital Learning Academy		Idaho Digital Learning	
	 Sign In Sign-in to access classes, and other resources.	 Help Find contact information.	
	 Course Catalog View currently offered on-line courses.	 IDLA Idaho Digital Learning Website	 Lili Libraries linking Idaho
			NEXT STEPS I D A H O

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
-



Budget Updates - FY16



- **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

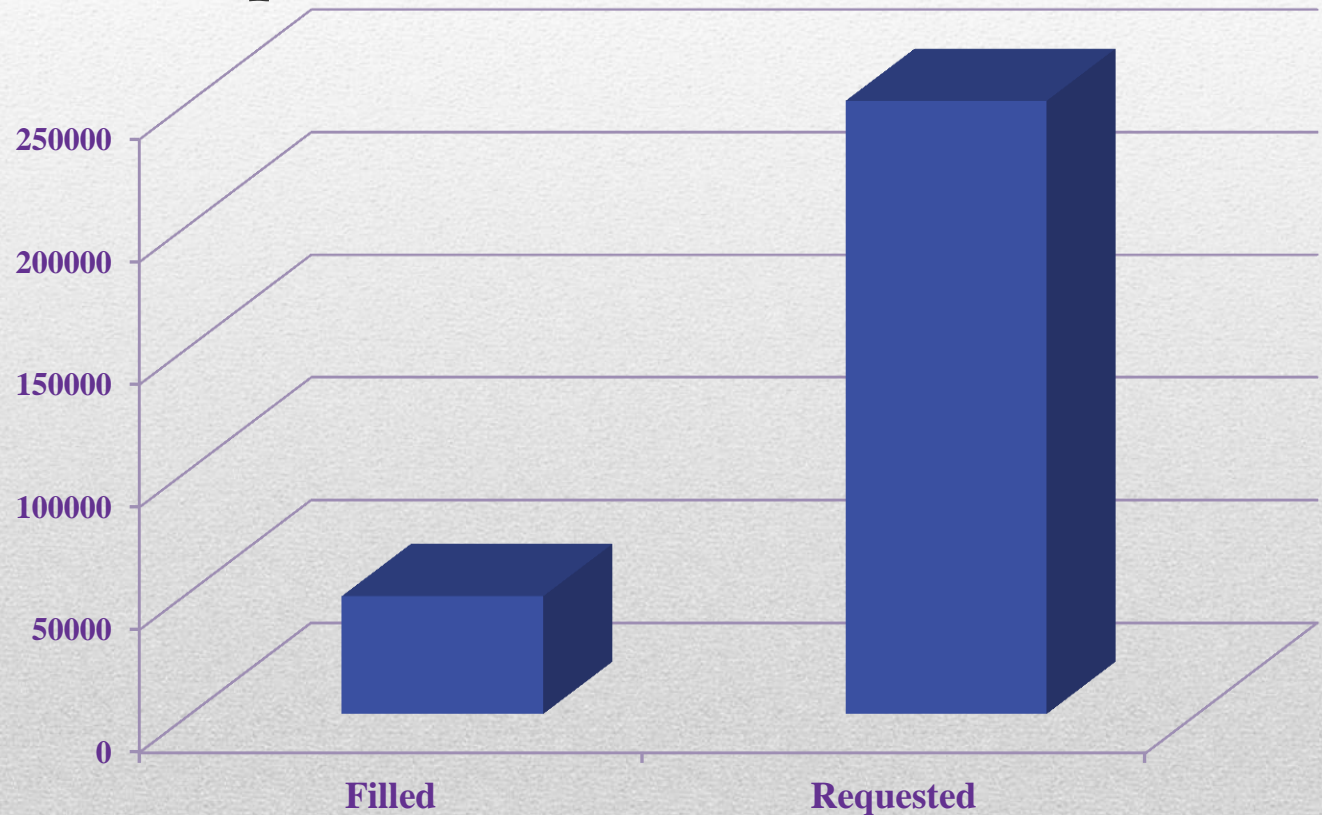


- **STEM Works and the rfp process**
- **Discussion and suggestions**



December 2015

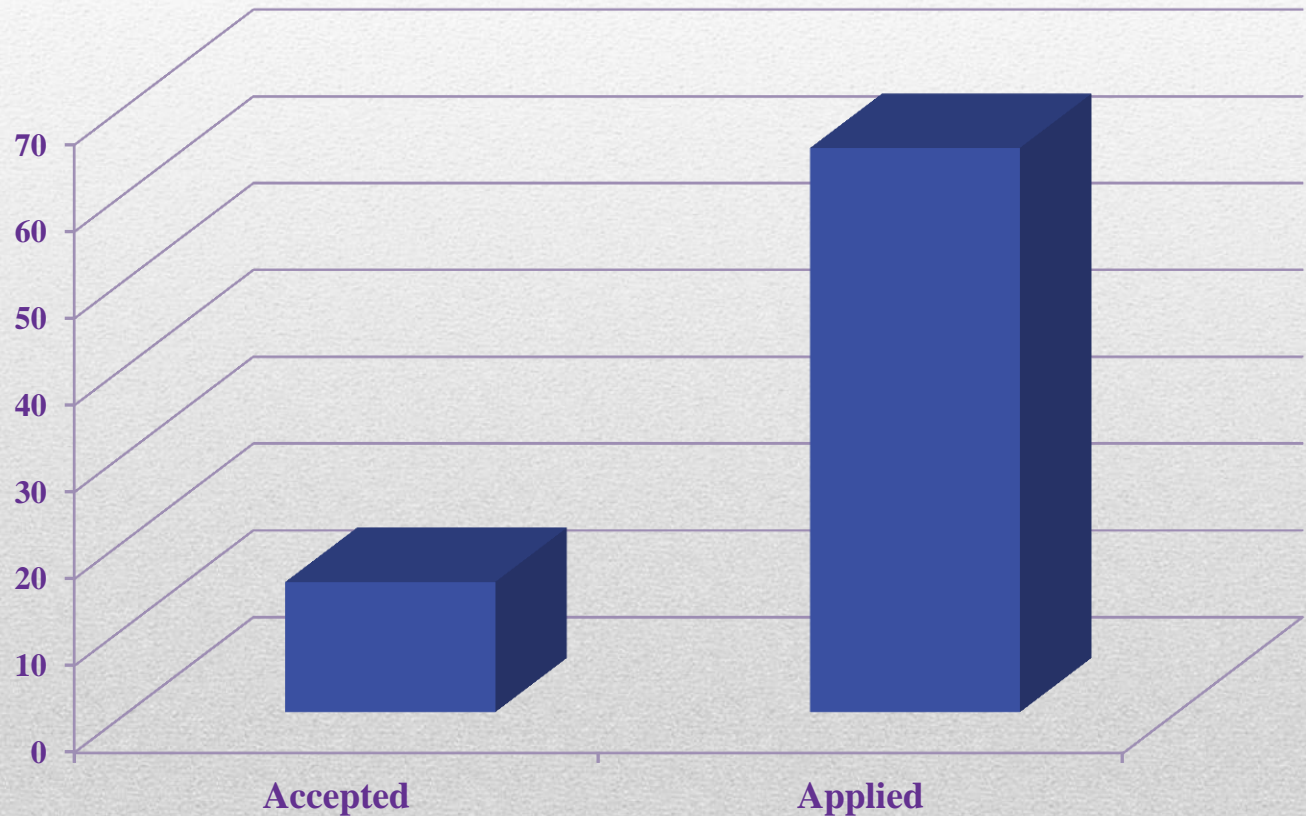
- 104 applicants with over \$250,000 in need
- 23 grants of up to \$2,500 awarded



PK12 STEM Grants - \$50,000

Occurs March 14 – 16, 2016 at Discovery Center

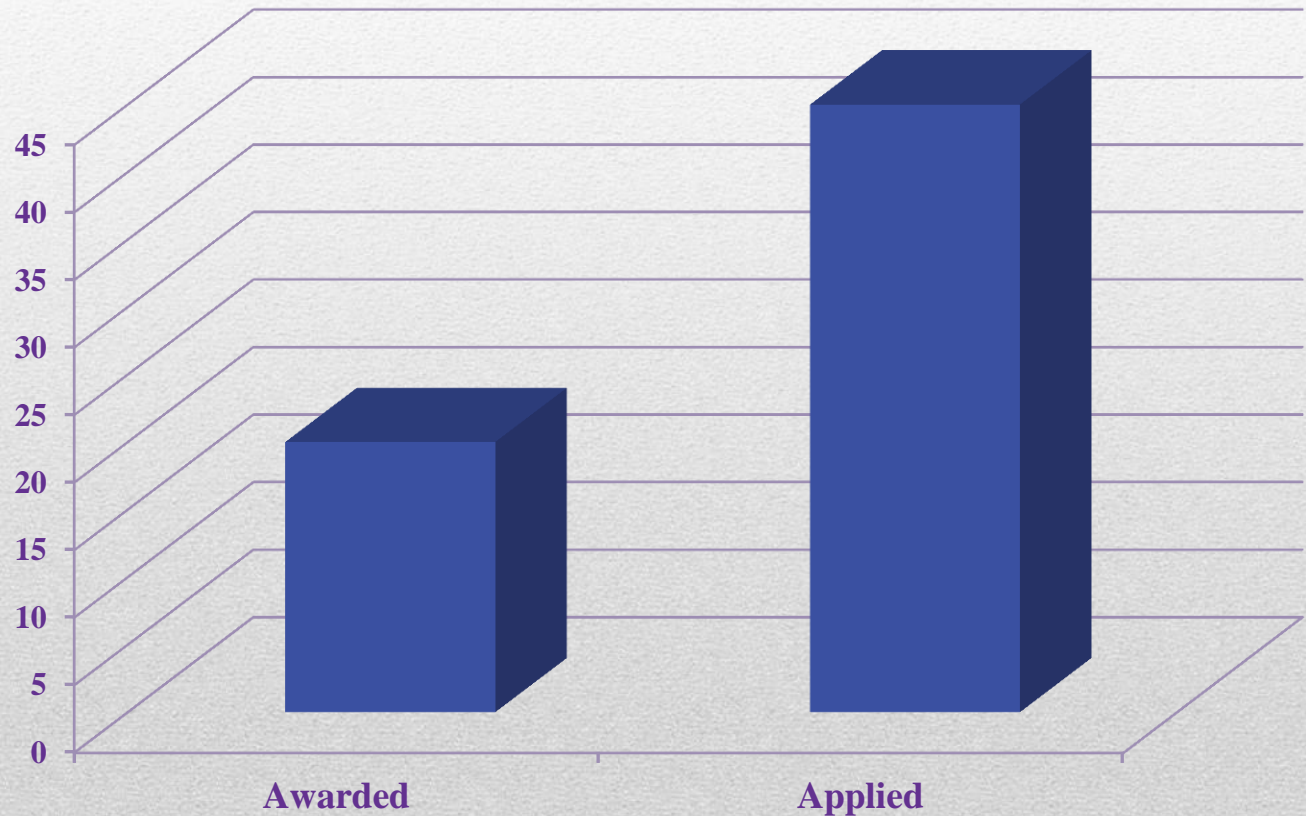
- 65 applicants in one week
- 20 educators selected



FabSLAM 3D Design and Fabrication

Educators are eager to host Family STEM Events

- 45 applicants
- 20 will be selected



Family STEM Events, Supported by Tesoro

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
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Pi Day FUNdraiser!!

STEM Matters & Pi Day FUNdraising Event

March 14, 2016 6:30 – 8:30 p.m.

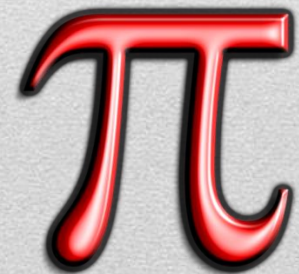
[Telaya Winery](#)

240 E. 32nd St.

Garden City, Idaho 83714

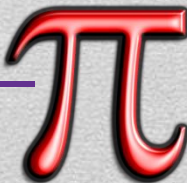


at stem.idaho.gov



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

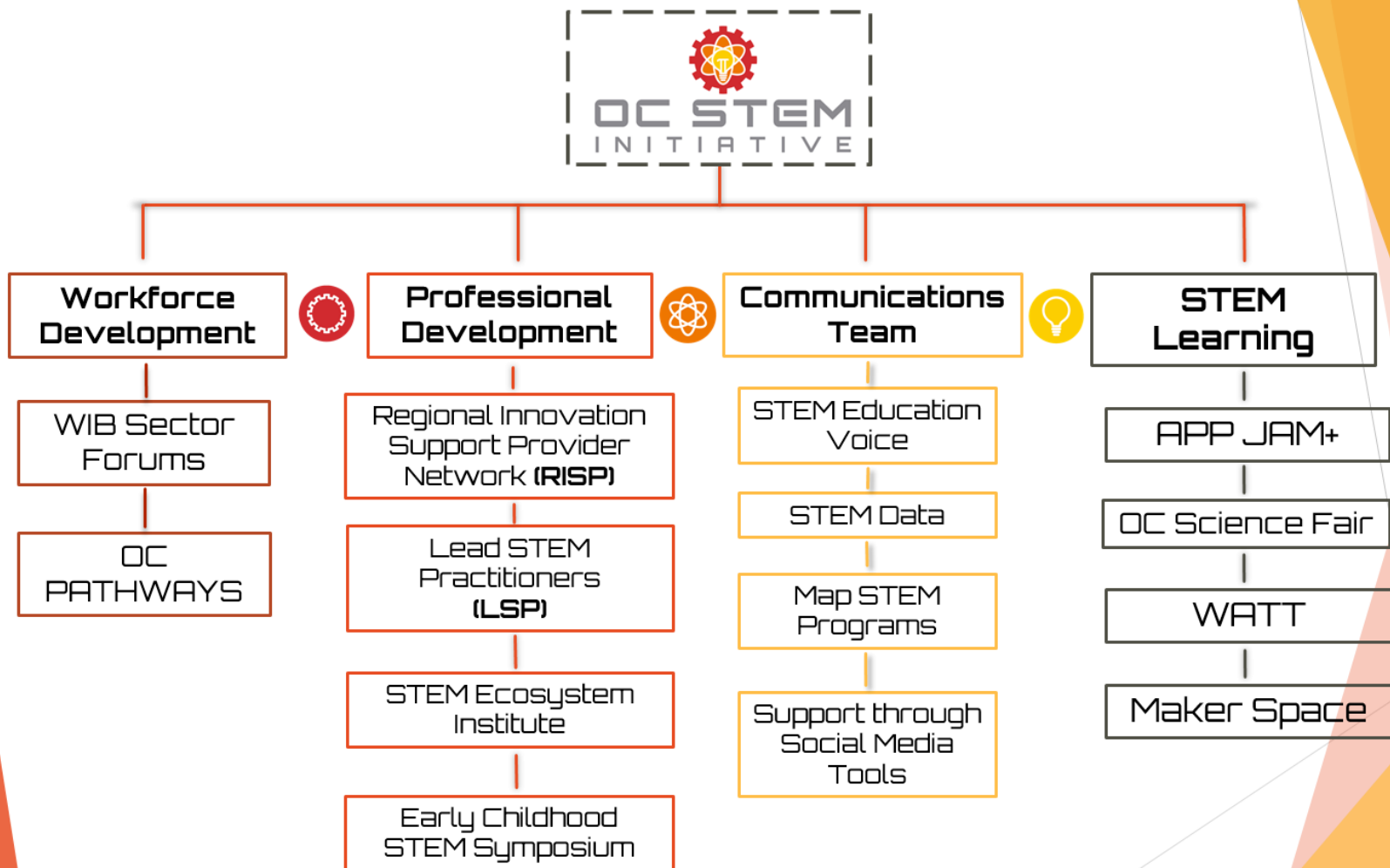
FOR EDUCATORS

- 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



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)
 - Student impact surveys including assessments
 - Pre- and post-surveys on STEM attitudes and STEM awareness
 - Communities of practice to share best practices
-

Projects and Programs

\$2M Ongoing, General Fund

\$100,000

- Conduct needs and gap analyses of industry and education
- STEM Action Center program evaluation

\$275,000

- K-16 STEM education
- Coordinate workforce needs with K-16 STEM education

\$150,000

- Database creation
- Professional development, competitions, grants, scholarships and resources for educators and workforce

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

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

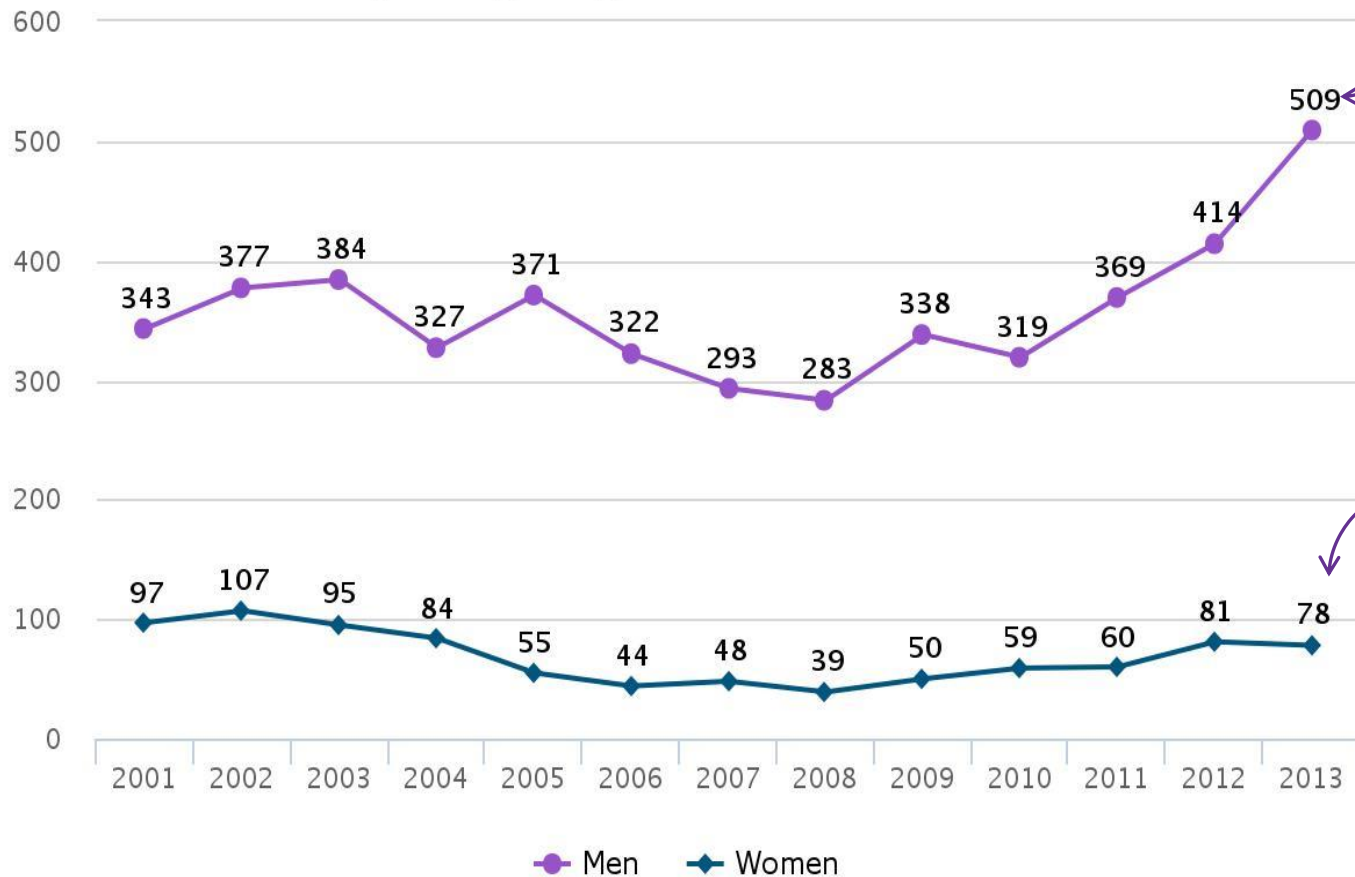
Investment in Idaho's Future

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

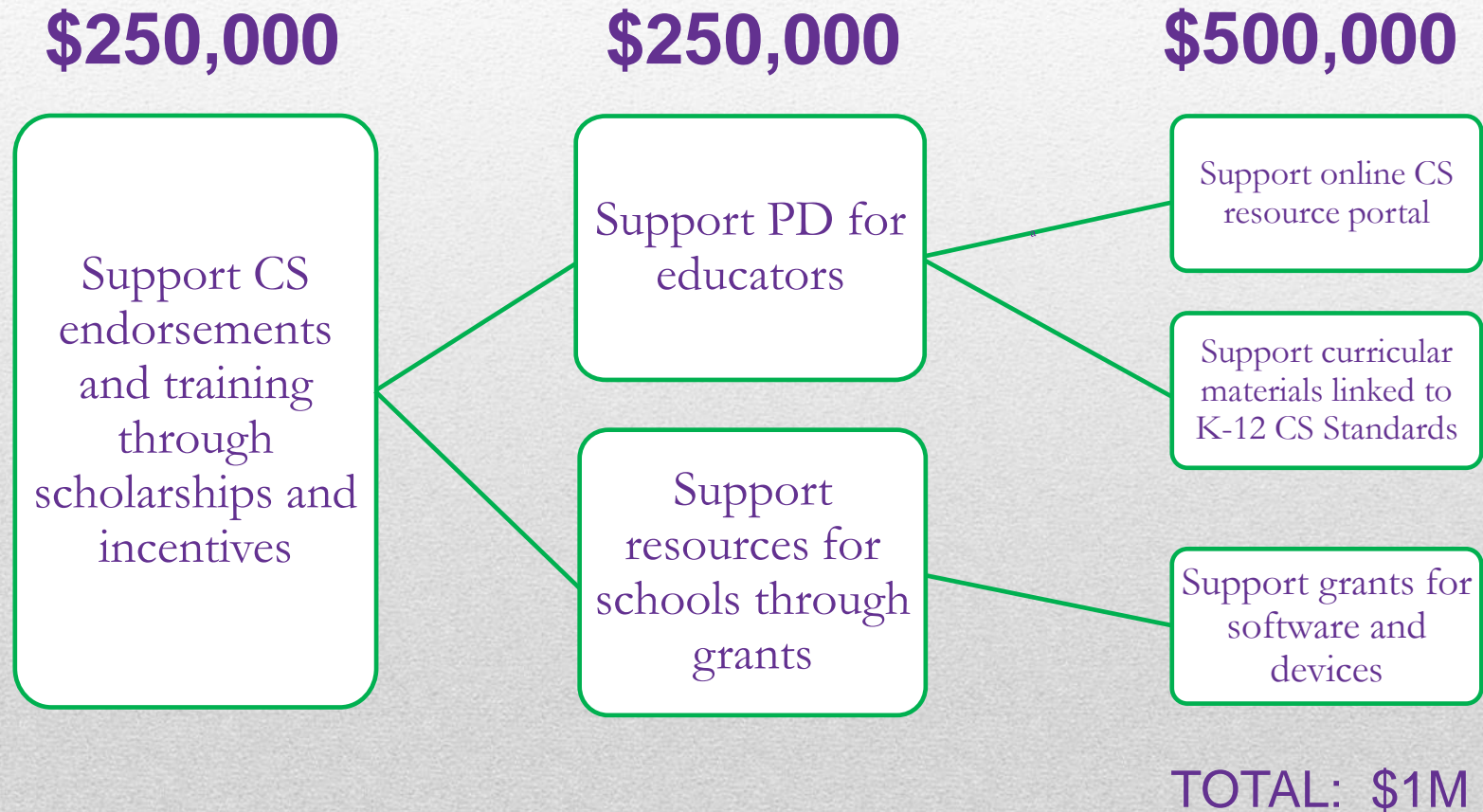
Number of computing degrees/certificates in Idaho



Source: U.S. Dept of Education 2001 – 2013

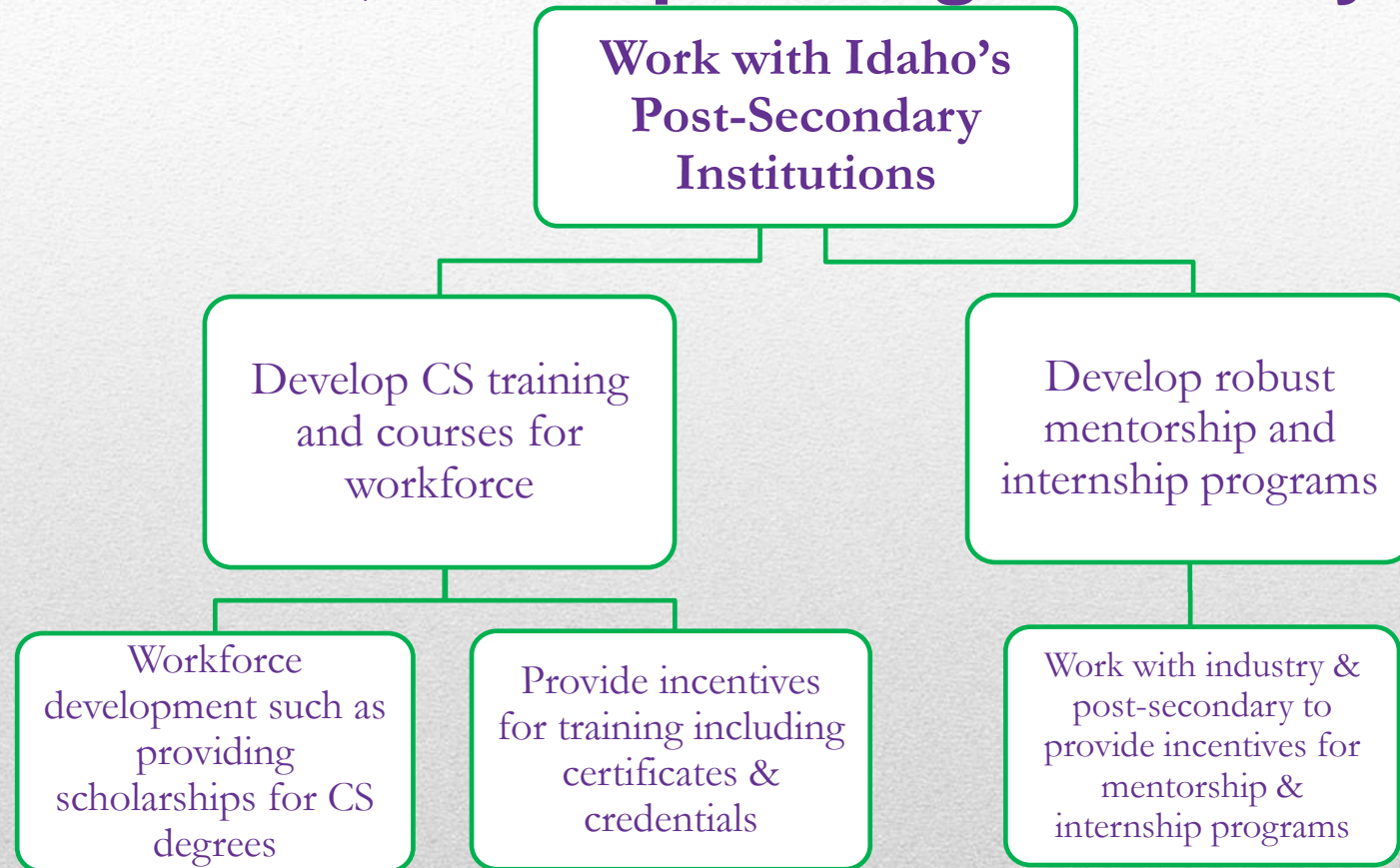
Collaborate to Support Idaho Educators

DU#2, \$2M Spending Authority



Collaborate to Support Idaho's Workforce

DU#2, \$2M Spending Authority



CUMULATIVE TOTAL: \$2M

Program Manager for CS Initiative

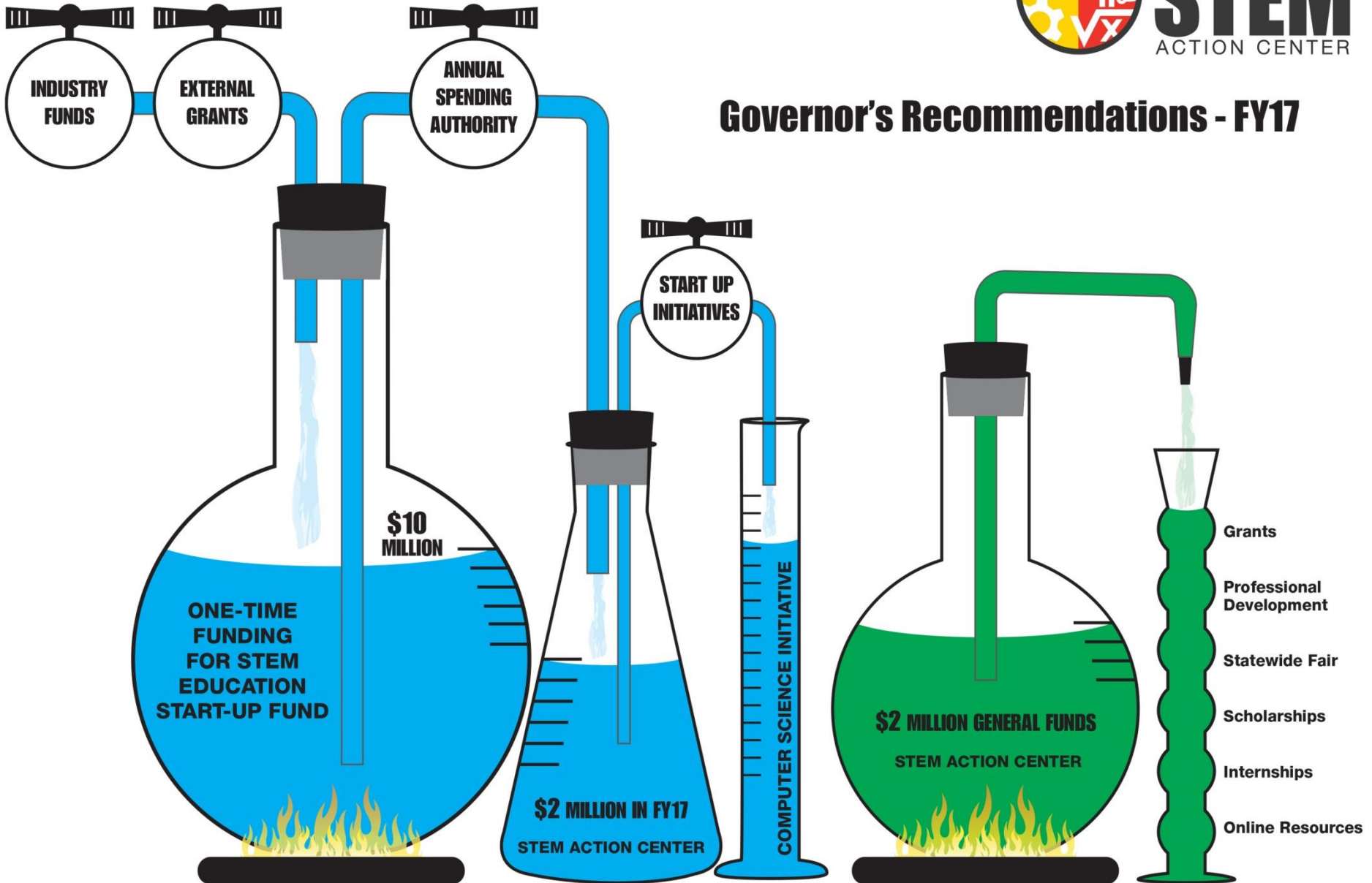
Oversee all aspects of initiative including:

- 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



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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

