

# Board Meeting

## March 7, 2016



**IDAHO**  
**STEM**  
ACTION CENTER

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**Room WW17**

**1:00 - 4:00 pm**

# IDLA Portal

## Welcome Sherawn Reberry

- Update and Discussion

The screenshot shows the IDLA portal interface. At the top left, it says "Idaho Digital Learning Academy". At the top right, there is a logo for "Idaho Digital Learning" with a stylized map of Idaho. Below the header is a large image of a young man in an orange shirt sitting on the grass and using a laptop. To the right of this image are two green buttons: "Sign In" with a person icon and "Help" with a question mark icon. Below the image and buttons are four more green buttons: "Course Catalog" with a book icon, "IDLA" with a house icon, "Lili" with a star icon, and "NEXT STEPS IDAHO" with a large "NEXT STEPS" text and "IDAHO" in a smaller font below it.

**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 14<sup>th</sup> 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 10<sup>th</sup>, 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

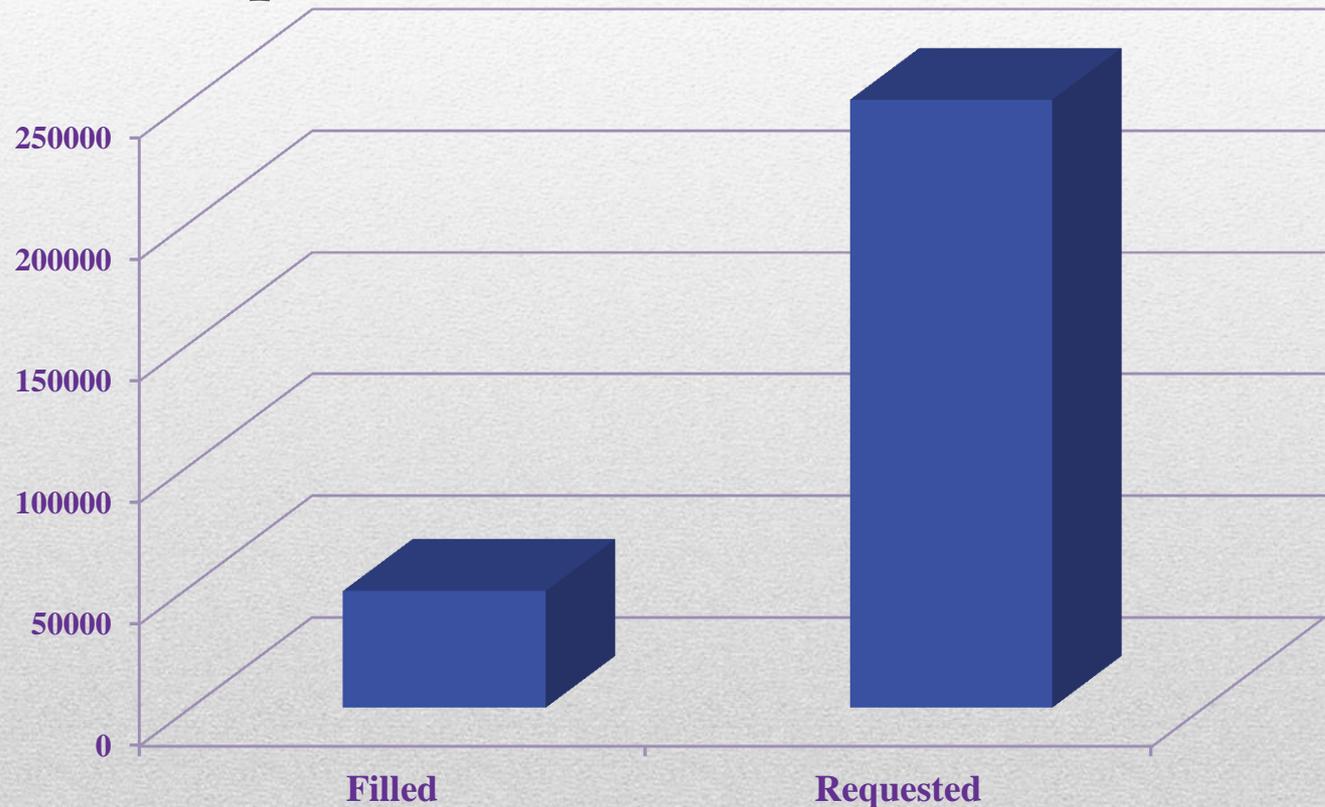


- **STEM Works and the rfp process**
- **Discussion and suggestions**



## December 2015

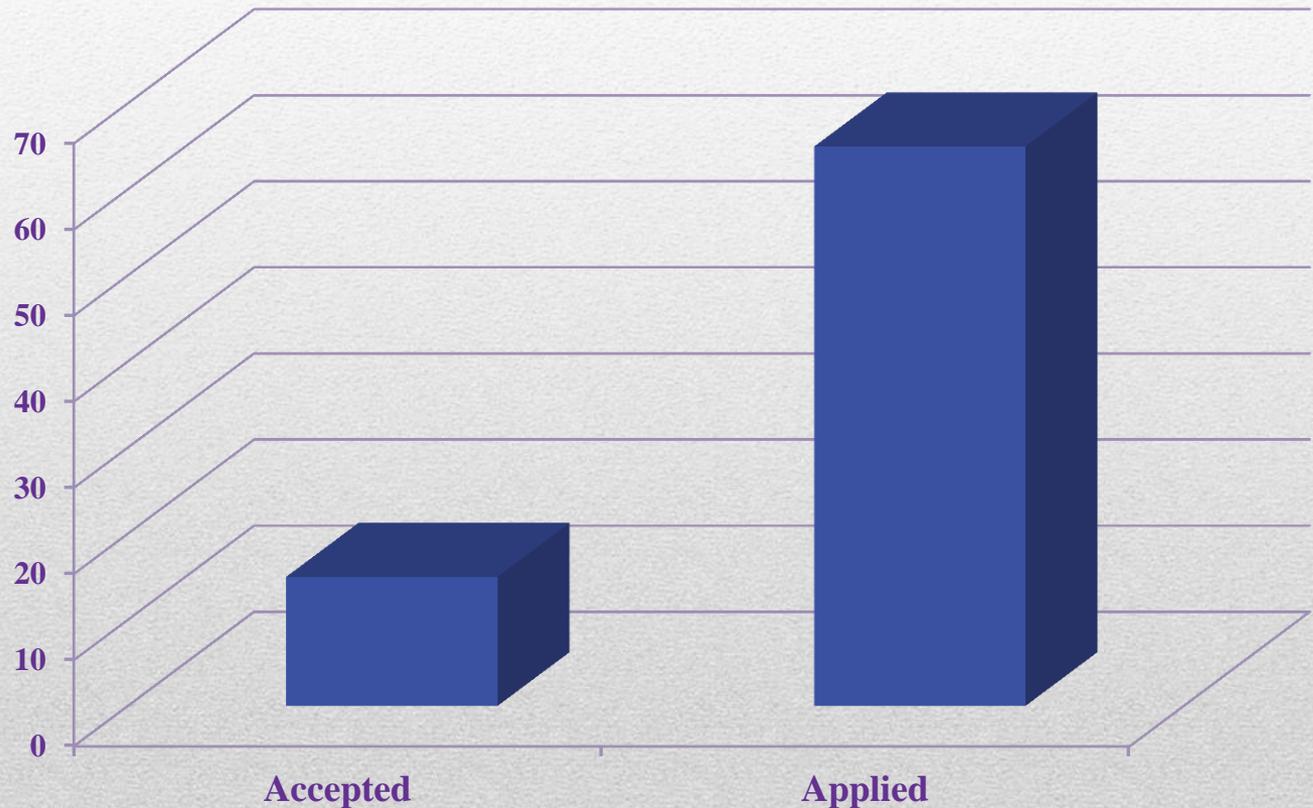
- 104 applicants with over \$250,000 in need
- 23 grants of up to \$2,500 awarded



**PK12 STEM Grants - \$50,000**

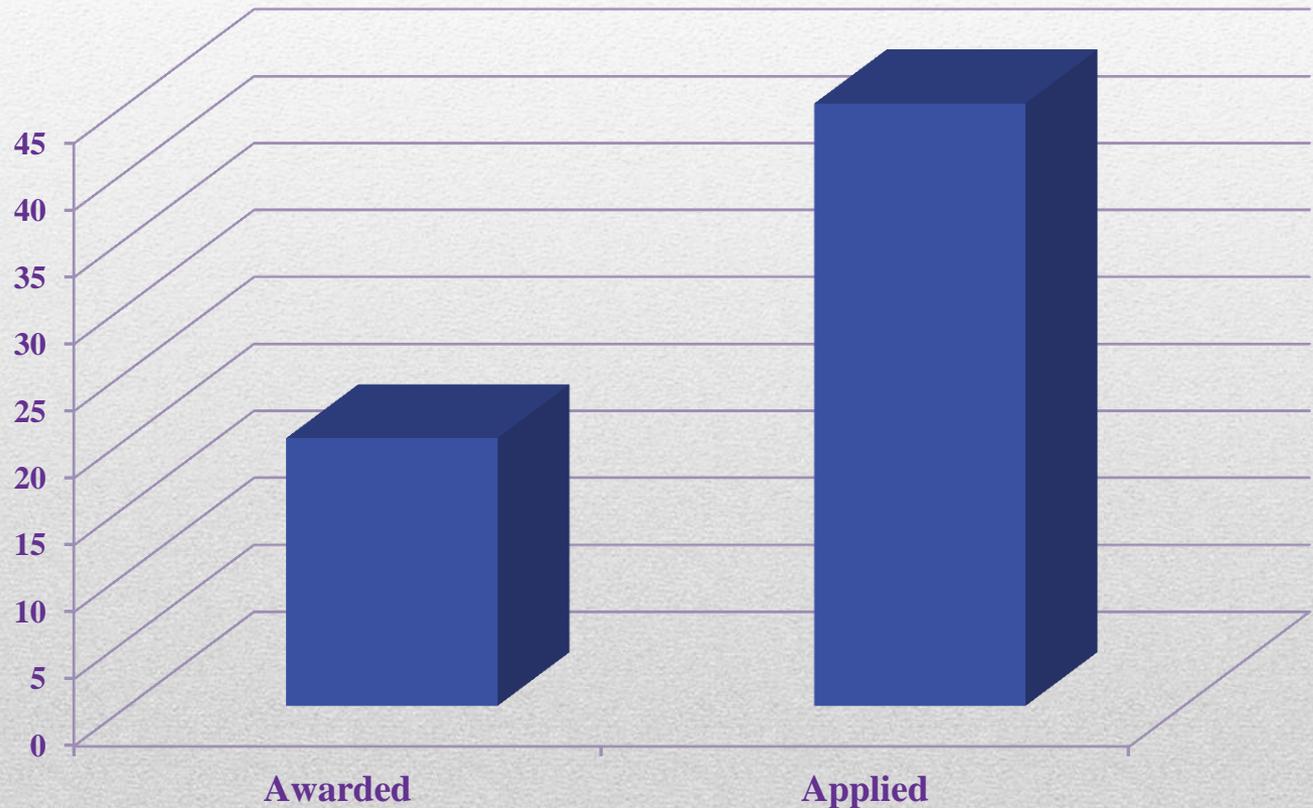
# Occurs March 14 – 16, 2016 at Discovery Center

- 65 applicants in one week
- 20 educators selected



# 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 2<sup>nd</sup>, 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.

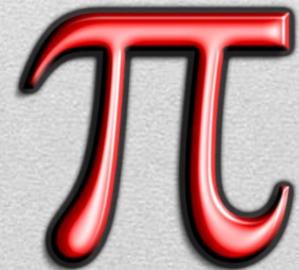
[Telaya Winery](#)

240 E. 32nd St.

Garden City, Idaho 83714

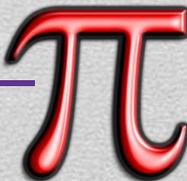


at [stem.idaho.gov](http://stem.idaho.gov)



# 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



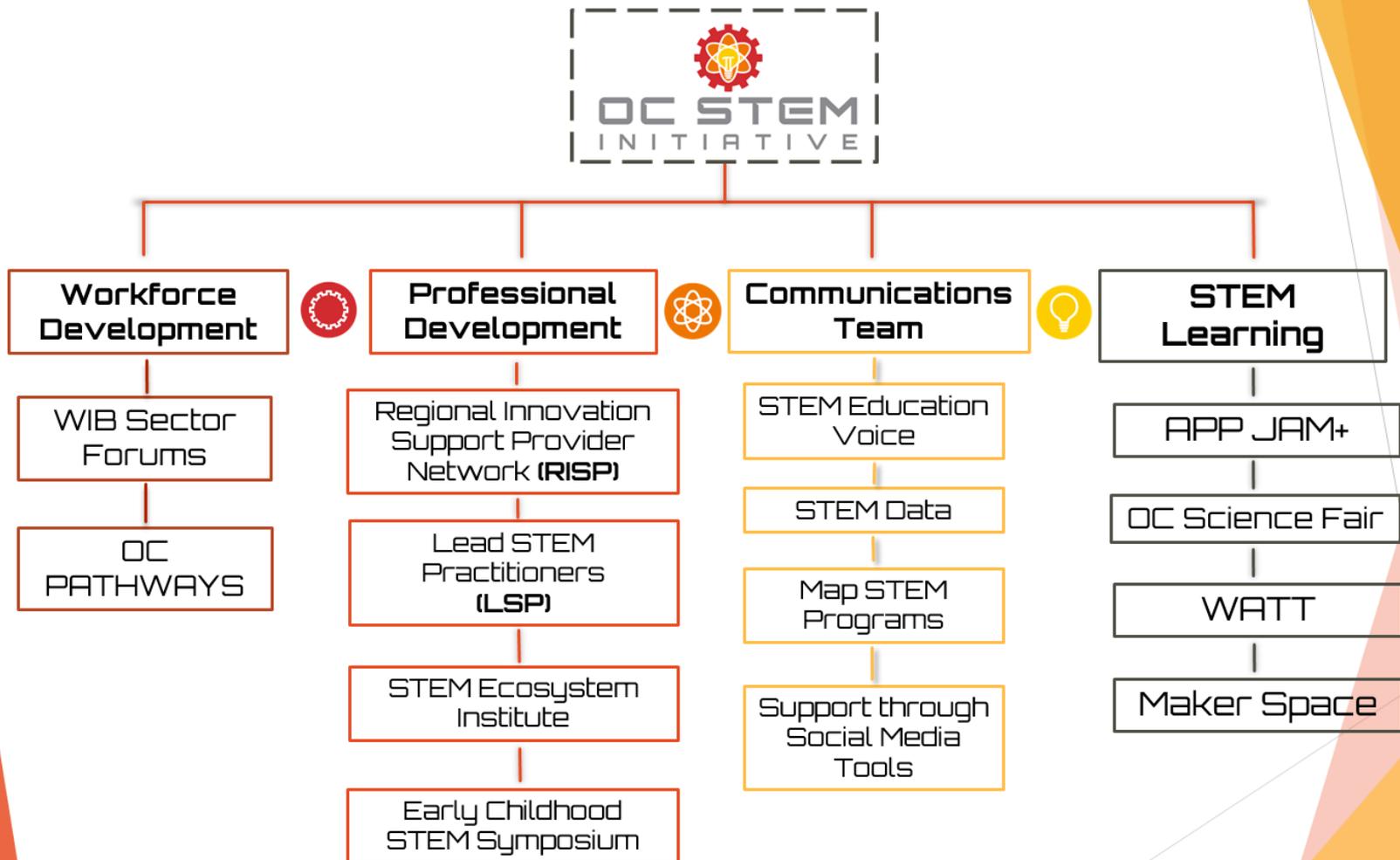
## FOR EDUCATORS

- 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 – 13<sup>th</sup> in Phoenix, Az
    - Board attendance?
-

# STEM Education Start-Up Fund

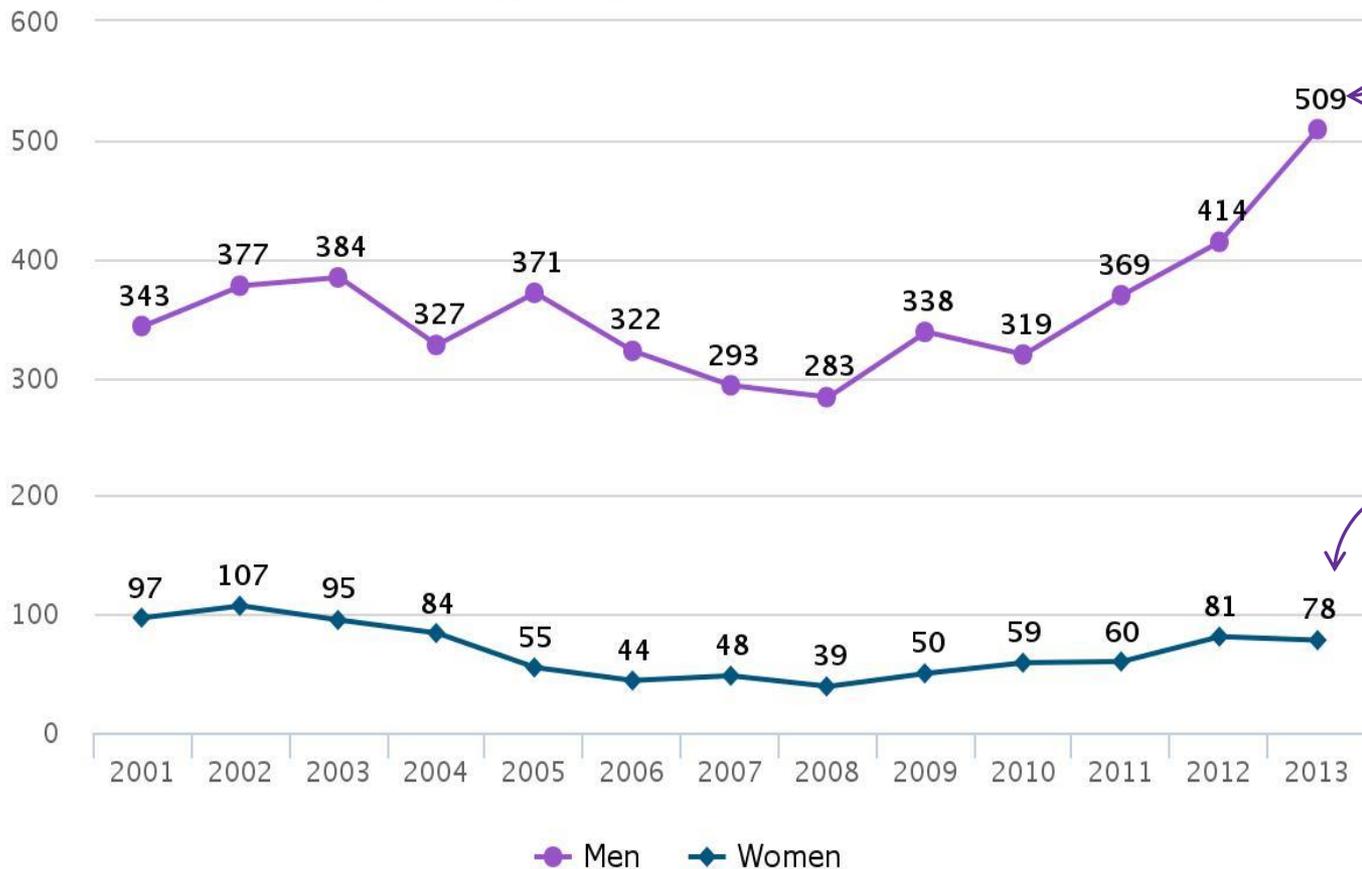
## Investment in Idaho's Future

### 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 49<sup>th</sup> in Women Earning Computer Science Degrees

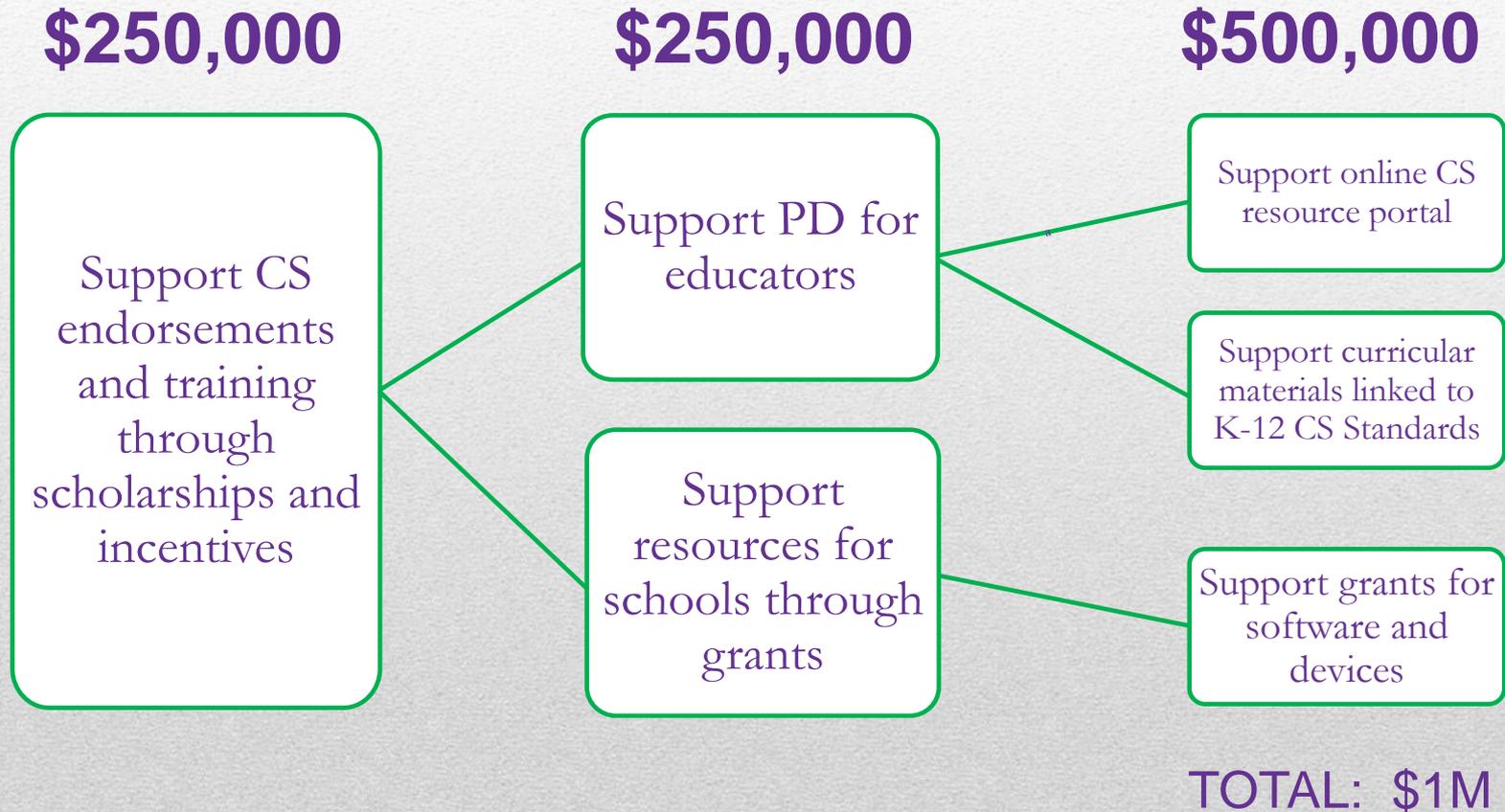
Number of computing degrees/certificates in Idaho



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

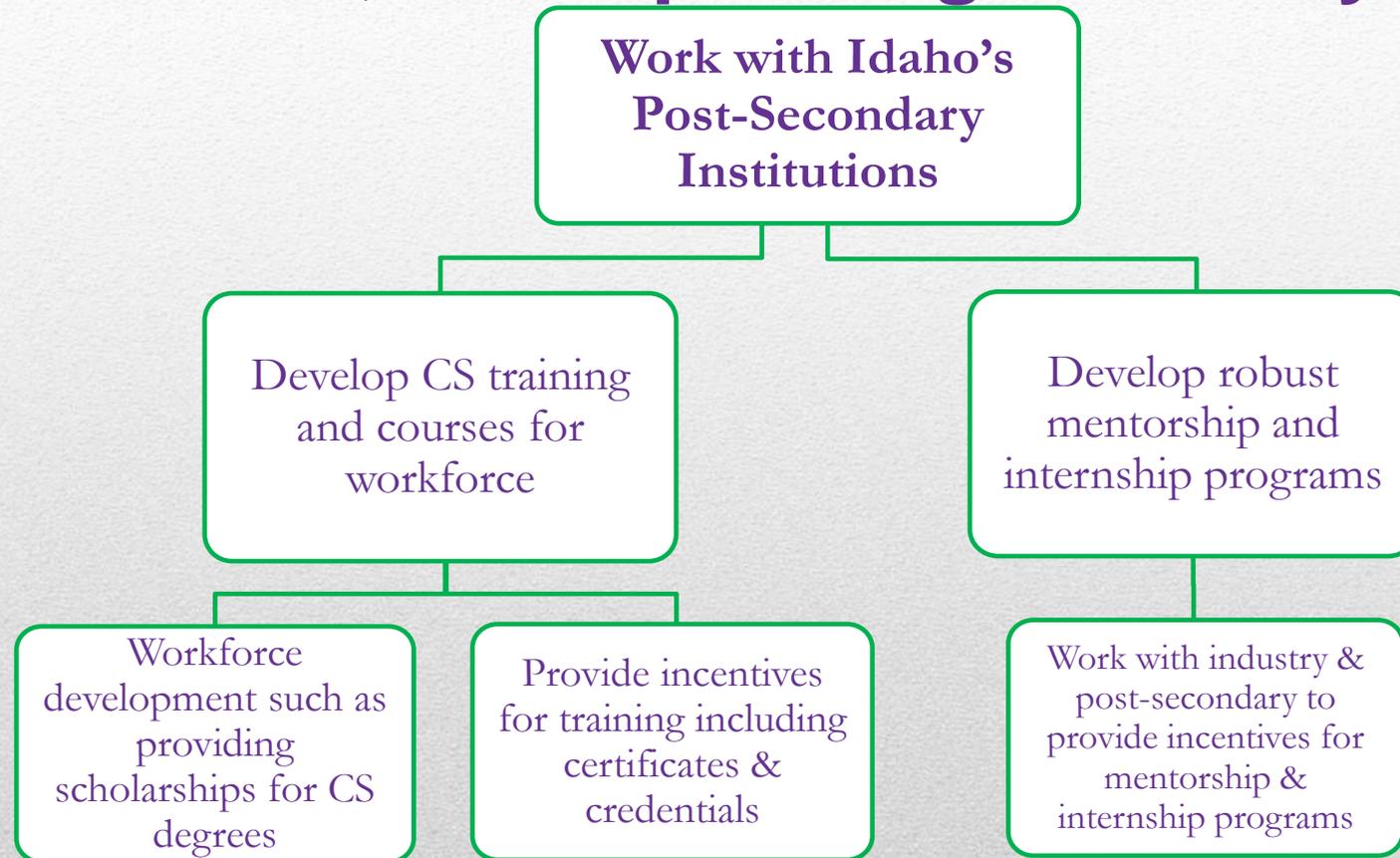
# Collaborate to Support Idaho Educators

## DU#2, \$2M Spending Authority



# Collaborate to Support Idaho's Workforce

## DU#2, \$2M Spending Authority



**CUMULATIVE TOTAL: \$2M**

# Program Manager for CS Initiative

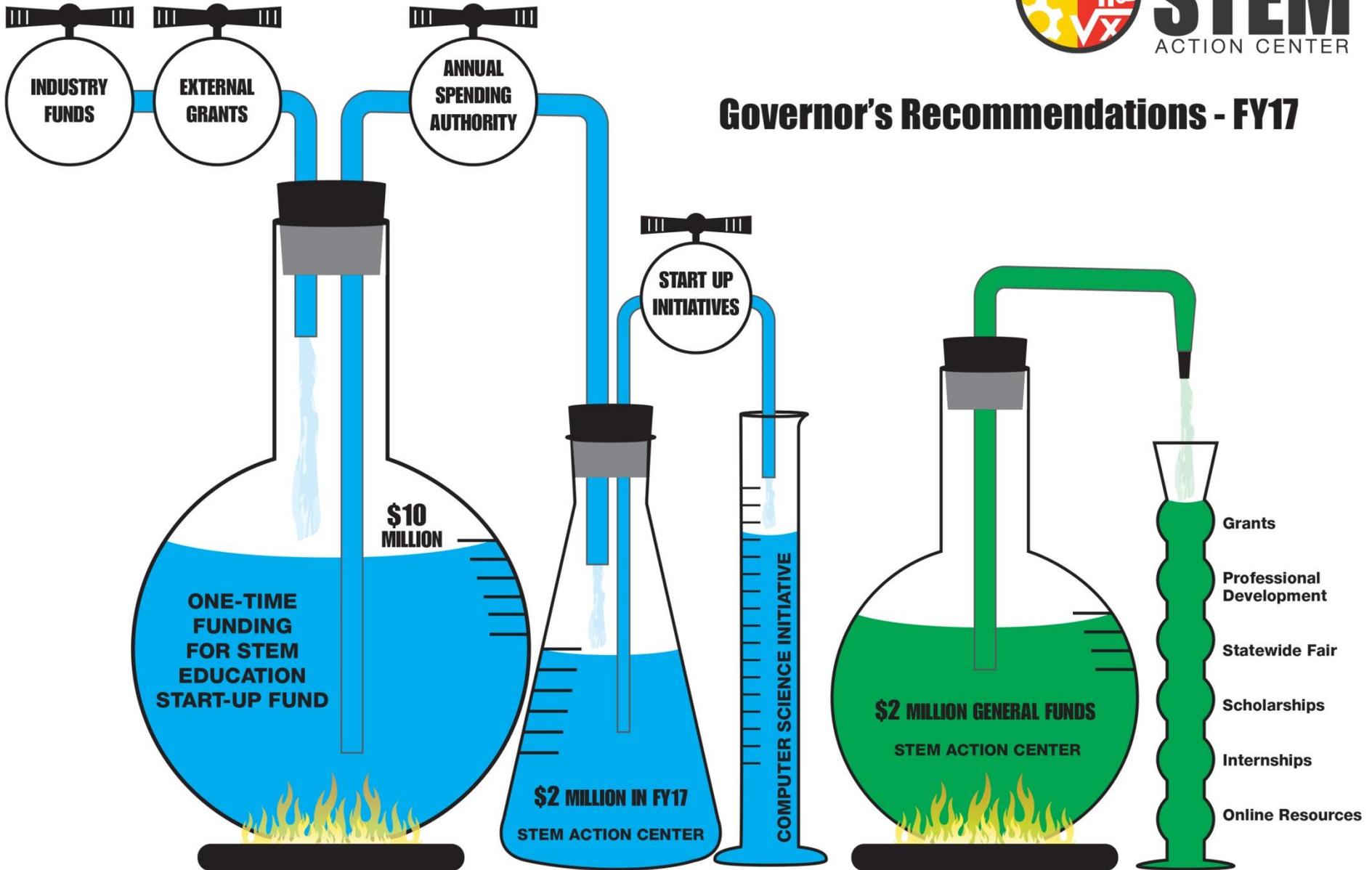
**Oversee all aspects of initiative including:**

- 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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**STEM**  
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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
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# 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

