

Board Meeting

August 8, 2016



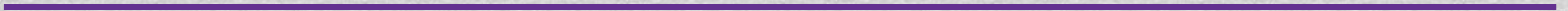
IDAHO
STEM
ACTION CENTER

Room WW17

1:00 - 4:00 pm

Welcome Finia Dinh

Computer Science Program Manger



CS Updates

- Code.org/IDLA
- CS Co-Op
- Dig n IT Camp
- Oracle
- Zero Robotics



CS Updates

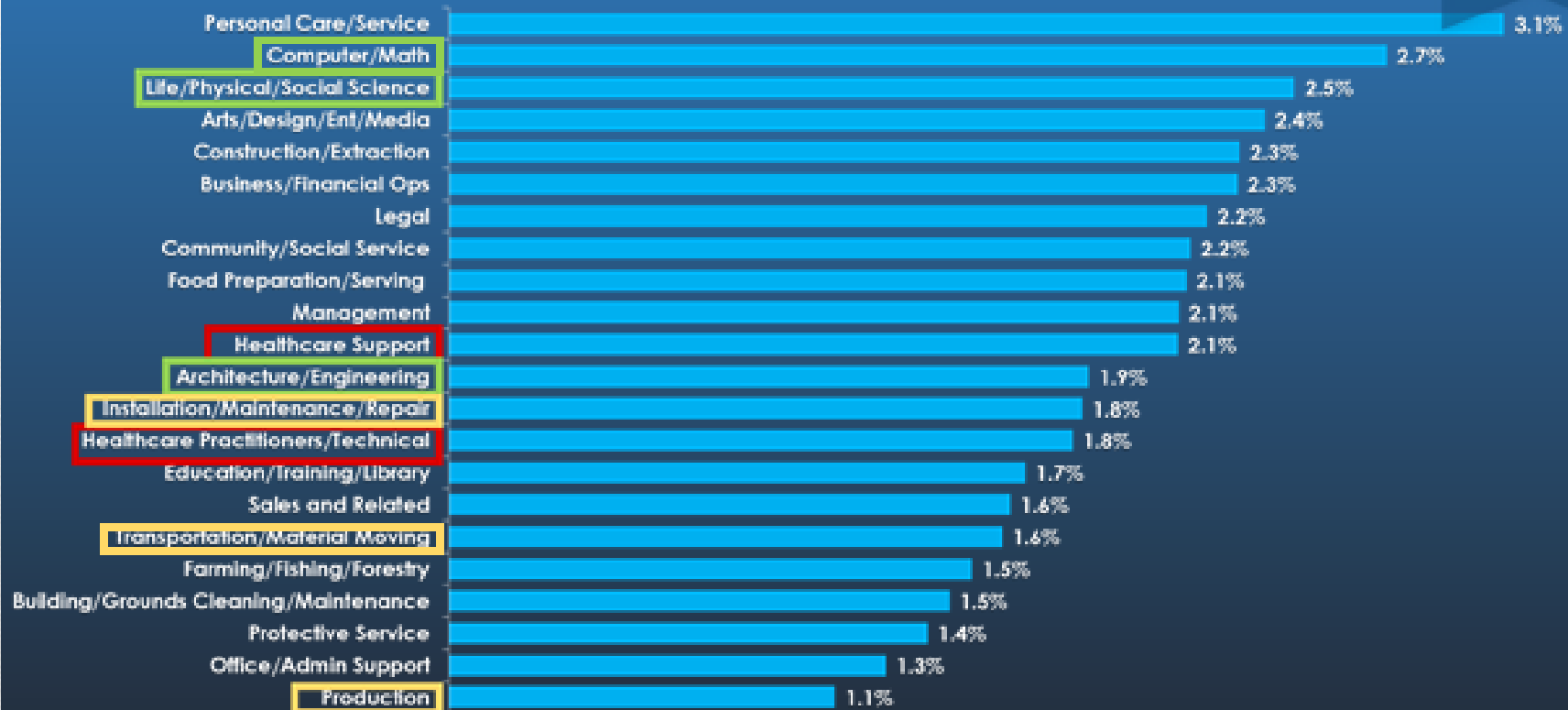
- INDEEDS Awards
- Business Educator Exchange
- Congressional App Challenge
- IDOL STEM Occupational Projections



CS Updates

Occupations in Idaho: 2014 – 2024 Projected Annual Growth Rates

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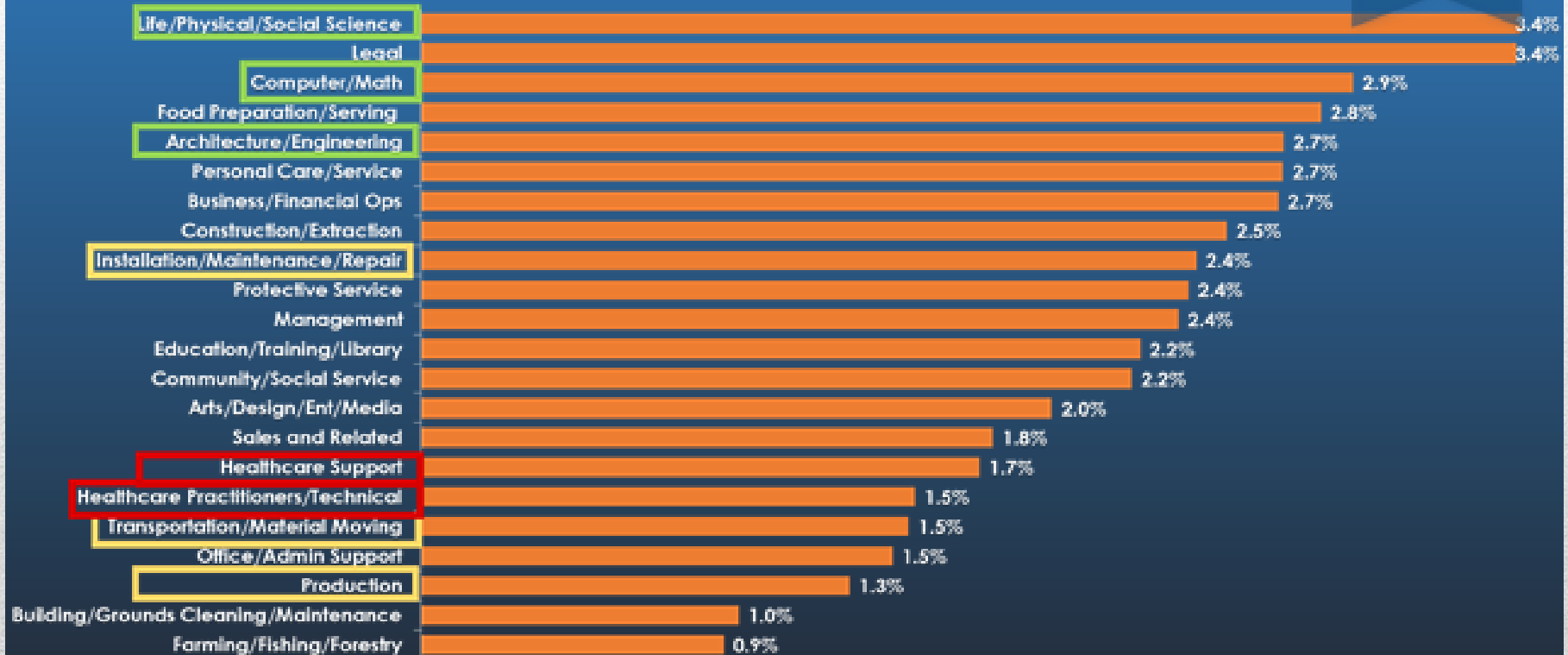


Source: Idaho Department of Labor and the U.S. Bureau of Labor Statistics

CS Updates

Occupations in SW Idaho: 2014 – 2024 Projected Annual Growth Rates

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Source: Idaho Department of Labor and the U.S. Bureau of Labor Statistics

CS Updates

STEM Occupations 2014 – 2024

Projected Growth Rates for STEM and Non-STEM Occupations

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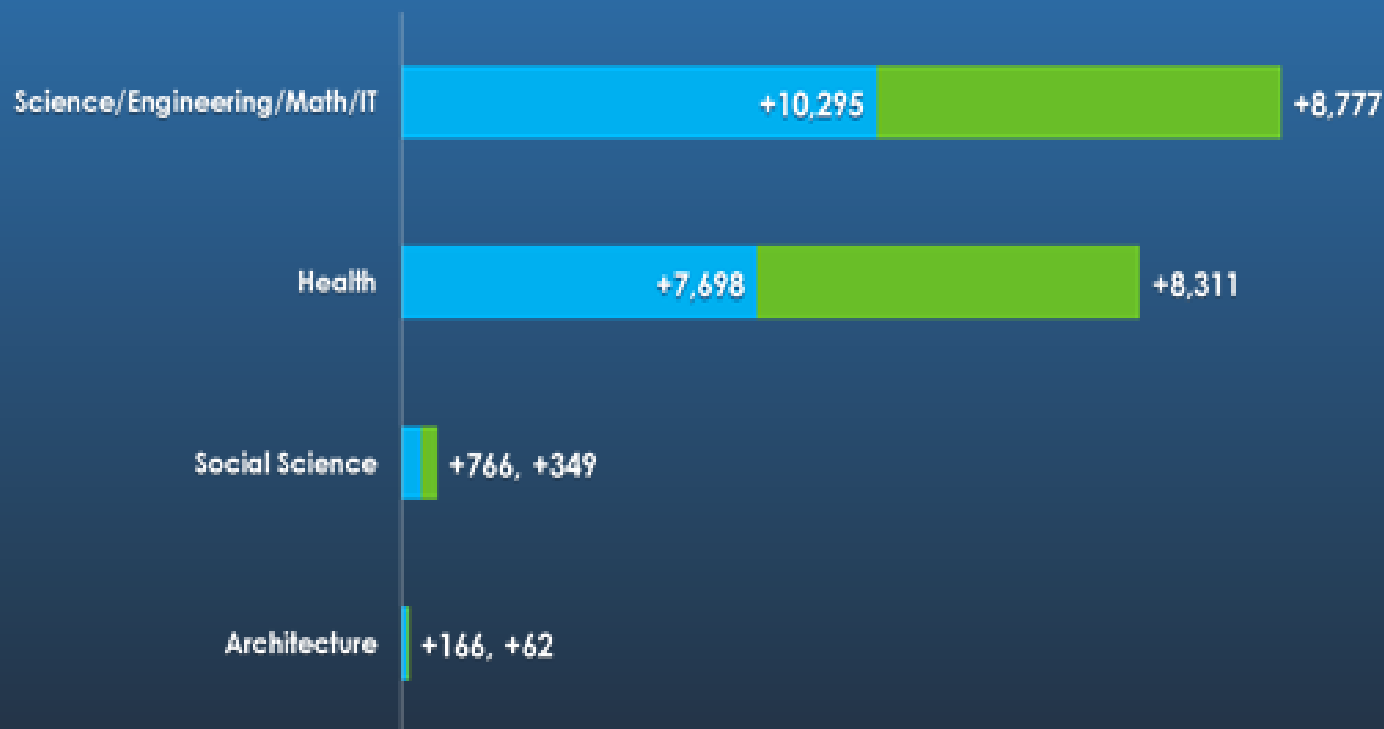


Source: Idaho Department of Labor and the U.S. Bureau of Labor Statistics

CS Updates

STEM Occupations: 2014 – 2024 Projected Openings from Growth and Replacements

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Source: Idaho Department of Labor and the U.S. Bureau of Labor Statistics

STEM Updates

- ✓ Intel Science & Engineering Fair PD
- ✓ Idaho Day of Design
- ✓ STEM Day at the Fair
- ✓ Salesforce/Community Grant Portal



ISEF Updates

- Collaborating with BSU, U of I, ISU in year one
 - Working group of 12 individuals formed
 - PD is occurring now for ~30 educators (10 per region); educators receive \$3,000 for stipend, travel to PD and student travel to Fair + Fair supplies
 - Working on industry support
 - Communication plan is in progress
 - 3 Regional Fairs will occur late Feb/early March
 - 1-2 winners from each region sent to Nationals
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STEMx Advisory Board

- Angela was recently selected to serve as a member of the seven panel STEMx Advisory Board
 - STEMx is a national group involving 21 states and focused on advancing STEM-related issues nationwide
 - In this capacity, she will:
 - Help identify STEM education issues that should be addressed by STEMx;
 - Prioritize topics and seek additional STEM funding, support and legislation on a national level;
 - Oversee the creation of the agenda for the national STEMx meeting
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Contractors Hired

- Crispin Gravatt - Grants
 - Cindy Thorngren - Mentorship
 - Gina Schatteman – PD
 - Christina Linder - Research & Review
 - Cathy Salas – Temp administrative support through October
 - ISEF Contractors – Merrie Rampy (K12), Ken Wareham (Higher Ed and Industry) and Nick Hoffman (onsite fairs) + 8 volunteers
 - Media, Public Relations, & Communications
 - Chad Gammel – website, social media, STEM event coordination, & PR strategies
 - Tony Harrison – PR, media outreach & communications
 - Jonny Fuego – Graphic Designer
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Contactor Needed

- **Grant Writer** to help us secure federal, state and industry grants
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FY16 Performance Report

- See handout
 - Due September 1st per law
 - Performance measures based on our Strategic Plan
 - Docs sent for review & input over the next 2 weeks
 - Template can be found at:
<https://dfm.idaho.gov/perfreport2018/perfreport2018.html>
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STEM AC Policy Paper

- Focuses on 5 Broad Areas
 - Definition of *STEM*
 - Definition of *high quality STEM professional development*
 - Definition of *traditionally underrepresented populations* in STEM
 - Typical *college/career pathways* leading to STEM jobs
 - Industry and workforce *needs* in STEM
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Definition of STEM

- STEM to the Center means integration of at least two STEM subjects
 - Why?
 - STEM professionals practice integrated STEM
 - Ensures differentiation from the SDE
 - Definition of STEM is broad to match the Department of Labor
 - 184 occupations including traditional STEM professions + health care + some social sciences
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High Quality STEM PD

- Cannot be “one and done” or “drive by” PD
 - Must include buy-in and support from the administration
 - Must be sustained and intense
 - 30 – 100 hours is most effective over 6-12 months
 - Over 80 hours = teachers doing more hands-on & inquiry-based instruction
 - Could be face-to-face, virtual or blended
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STEM Works for Selecting PD

- Handout Overview
 - Using STEM Works rubric + Idaho-specific rubric with Idaho reviewers to select PD opportunities via RFP
 - Programs can run January 2017 – December 2017 with an option to renew for an additional year
 - Evaluation data will be collected from educators to determine effectiveness of the programs
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Underrepresented Populations

- Focuses on 4 groups
 - Geographic Location
 - Gender
 - Race/Ethnicity
 - Socioeconomic Status



College & Career STEM Pathways

- Middle School is critically important
- A variety of factors increase interest and awareness
 - Interest in **STEM coursework**
 - Project-based, relevant, hands-on, choice, coursework exposure
 - Interest in a **STEM career**
 - Mentorships, job shadows, competitions & awareness events



Industry & Workforce Needs

- According to Department of Labor
 - By 2025 Idaho will be lacking over 63,000 individuals needed to fill projected positions
 - 60% of Idaho's projected jobs will require college and/or training beyond a high school diploma
 - Focuses on Industry Education Connections
 - Mentorships, internships, career awareness, post-secondary-university connections
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Project-Based Mentorship Platform

RFP process started to obtain a statewide mentorship platform which:

- Must be virtual
- Must connect industry professional to students via an educator and a project (ISEF, FIRST, etc)

**Our goal is to be up and running
by January 2017**



Budget Discussion FY17

STEM and Computer Science

HANDOUTS



FY17 Analysis

BY PROJECT				
	STEM	CS	TOTAL	Percentage
Grants	575,000	570,000	1,145,000	27.99
PD	482,000	456,500	938,500	22.94
Scholarships	211,000	449,000	660,000	16.13
Competitions	252,000	55,000	307,000	7.50
Mentorship	180,000	160,000	340,000	8.31
Conferences	120,500	35,000	155,500	3.80
Marketing, Promotion and Evaluation	122,000	84,000	206,000	5.04
Operating Expenses	103,500	74,000	177,500	4.34
Pilot Projects	45,000	116,500	161,500	3.95
TOTAL	2,091,000	2,000,000	4,091,000	100

Budget Request FY18

(See FY17 Appropriation Handout)

STEM and Computer Science

Open Discussion related to request
DUE Sept 1, 2016

FY18 Budget Request

- Hold funds stable?
 - Request that these be ongoing?
 - Request new person (or two)
 - Grant and technical records specialist
 - Administrative assistant
 - Public information officer
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FY18 Possible Legislation

- STEM School Designation (See Handout)
 - Certifying (and providing incentives) for a statewide STEM designation
 - Research has been conducted looking at other states to determine if legislation and/or funding is needed
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Public Comment



Upcoming Events

Fall Board Meeting

October 11, 1:00 - 4:00pm

