

Idaho STEM Action Center Organizational Board Meeting

July 22, 2015

State Capitol, Room WW17

Boise, Idaho

10:00 a.m. – 4:00 p.m.

The meeting was called to order at 10:00 a.m. by acting Chairman David Hill.

Members present: David Hill, Ken Edmunds, Von Hansen, Lorna Finman, Dee Mooney, Tim Corder and Anne Seifert (substituting for Todd Allen).

Members introduced themselves and the organizations they represent.

Overview of Scope and Responsibilities of the STEM Action Center Board

Marilyn Whitney, Senior Special Assistant for Education and Government Services for Governor Otter, provided an overview of H 302, the legislation creating the STEM Action Center. The bill outlines the scope and responsibilities of the STEM Action Center Board and the Center's Executive Director.

Ken Edmunds asked if the Governor saw the board as a policy board or a programs board. Ms. Whitney explained that the board would be expected to address policy issues as they involve STEM education and workforce needs. However, the legislation requires the Center and the board to act as a coordinator of policy and programs related to STEM education in Idaho.

Ms. Whitney also provided an overview of the appropriation passed by the legislature (H 326) which gave the STEM Action Center ongoing funds for operating and personnel expenses and \$250,000 for programs and grants.

STEM Workforce Needs

Ken Edmunds, Director of the Idaho Department of Labor presented information and projections on workforce needs and the STEM skills gap in Idaho. In the future, due to the changing demographics of the baby boomer generation moving out of the workforce, there is a real workforce gap in Idaho and the nation. At the same time, jobs will require greater technical skills and education, and so, within that demographic gap, there will be a shift from lower skilled to higher skilled jobs. This is a national phenomenon. Because Idaho is a small state, we will need to be aggressive in creating a workforce that matches the future needs and in identifying policies that attract people in order to maintain or accelerate economic growth in the state.

The STEM Center needs to determine what it can do using the levers available to increase the workforce supply for STEM-related jobs. Tim Corder noted that there have been actions taken in other states to address these needs, and it would be helpful to know what has been effective in other states. Director Hill noted that the new Executive Director should do an inventory of policy actions that others have taken – both successful and unsuccessful – to ensure Idaho doesn't undertake failed strategies.

Ken Edmunds noted that the biggest area of deficiency reported by business and industry is in math. Idaho needs to do more to address this problem.

STEM Education Strategic Plan

Tracie Bent, Chief Policy and Planning Officer with the State Board of Education, provided the STEM Strategic Plan adopted by the Board of Education in 2014. STEM education is a high priority for the Board of Education. In 2012, they held a STEM Summit that brought together education and industry to talk about Idaho's needs and strategies to meet those needs. The STEM Strategic Plan is based on the input and discussions during and after that Summit.

The STEM Strategic Plan is based three broad goals: Equitable Access, Quality of Educators K-20, and Awareness of the importance of STEM education. The Board of Education has made several policy changes to address these goals including increased math standards, more rigorous graduation requirements in math and science, allowing computer science and engineering to meet graduation requirements, and changes in teacher preparation programs at the higher education institutions. They are currently working on performance benchmarks and how best to measure progress toward the goals.

There are specific activities that the STEM Action Center can undertake to help achieve the goals. For example, creating a complete and updated inventory or single database of STEM opportunities for teachers and students would be very helpful.

Statewide STEM Activities

Dee Mooney pointed out that there are many STEM activities happening in Idaho in classrooms, outside the classroom and with teacher professional development. There are several websites that list some of those activities, but there isn't a central "clearinghouse" to vet and list programs and opportunities.

Anne Seifert, K-12 STEM coordinator at INL, gave the board an overview of the i-STEM teacher professional development program that provides teachers with the opportunity to attend a focused week-long institute to learn how to integrate STEM activities into their classroom.

Christine Avila, Math Coordinator with the State Department of Education, provided an overview of the regional math centers that provide support for teachers through a partnership with Idaho's higher education institutions.

Executive Session

Dee Mooney moved and Lorna Finman seconded to hold an executive session pursuant to section 74-206 (1)(a), Idaho Code, to consider hiring a public officer, employee, staff member or individual agent, wherein the respective qualities of individuals are to be evaluated in order to fill a particular vacancy or need. The motion passed unanimously.

The board reconvened in open session with no action taken.

Discussion with Utah STEM Action Center

Stan Lockhart, with IM Flash in Utah, and Tami Goetz, Executive Director with the Utah STEM Action Center joined the meeting and shared their expertise and lessons they have learned. Utah has focused on teacher professional development, pilot programs in digital learning tools in math, and STEM classroom grants. They shared how they formed partnerships with industry and how they approached funding via economic development channels rather than competing for funds with education.

SWOT Analysis

The board conducted a brief SWOT analysis that can be added to as things progress.

Strengths:

Legislative support

i-STEM

Key industry partners

Lessons learned from Utah

Segregated funding (shows widespread support)

Higher education system focused on STEM

Growth in community college

Weaknesses:

Segregated funding (different sources and uses and programs for STEM w/no central coordination)

No real inventory yet of STEM programs and activities

Lack of performance measures

What is the target and need for STEM careers (lack of data)

Too narrow view of STEM

Technology infrastructure

STEM awareness and college and career advising

Opportunities:

Third party evaluation
Developing awareness campaign – college and career advising
Partner involvement
Greater industry involvement
Create one Idaho approach to STEM
Changing the culture around STEM – especially in rural Idaho
Expansion of i-STEM participation for high school teachers
Expand view of STEM – more focus on PTE and Ag
Expand community college STEM offering to fill gap
Idaho’s small size makes it possible to make STEM personal
Better use of technology to reach rural areas

Threats:

Bureaucratic in-fighting / not real collaboration
Not show adequate real progress prior to next legislative session
Inadequate funding – diluted programs – lack of focus
Inadequate leadership
Economic downturn affecting major technology industries in Idaho

Miscellaneous

Von Hansen moved and Lorna Finman seconded to elect David Hill as Chair of the STEM Action Center Board for the next year. The motion passed unanimously.

Future Meetings

The board discussed holding monthly meetings for the next several months. A doodle poll will go out to board members to identify the next meeting date.

Miscellaneous

The board agreed to add the two annual winners of the Industry’s Excellent Educators Dedicated to STEM (INDEEDS) awards to the board as ex-officio members.

The board discussed that these are K-12 teachers and should higher education have a rotating seat on the board. Chairman Hill suggested the Executive Director convene a committee of higher education to discuss how they can partner with the Center.

The meeting adjourned at 3:55 p.m.