

MINUTES
HOUSE EDUCATION COMMITTEE

DATE: Tuesday, February 07, 2017
TIME: 9:00 A.M.
PLACE: Room EW41
MEMBERS: Chairman VanOrden, Vice Chairman McDonald, Representatives Shepherd, Boyle, Clow, Mendive (Mendive), Kerby, Cheatham, Amador, DeMordaunt, Moon, Syme, Kloc, McCrostie, Toone
**ABSENT/
EXCUSED:** None
GUESTS: Stephanie Lee, Idaho STEM Action Comm; Nanna Hanchett, IDVR; Teresa Pitt, IDVR; Mark Donnellan, EES; Angela Hemingway, STEM; Paul Stark, IEA; Melyssa Ferro, State Dept. Science Commission; Sue Widgorski, IEA; Micah Lauer; Clark Corbin, Idaho ED News; Misty Swanson, ISBA; Harold Ott, ISBA; Helen Price, IASA; Matt Compton, IEA; Dennis Stevenson, Rules Coordinator

Chairman VanOrden called the meeting to order at 9:00 am.

Tim McMurtrey, Deputy Superintendent of Operations, introduced **Scott Cook**, Director of Academic Services, to present Temporary Rule, **Docket No. 08-0203-1701**.

Scott Cook, Director of Academic Services, explained the Idaho Science Content Standards Temporary Rule as an informational session to explain the revision which was negotiated in the spring of 2016 with the formation of the State Department Science Commission(SDE). The focus in the last two years was to have an inspection and assessment of how Science Standards were supporting teaching and learning. He explained the curriculum must be a detailed plan for how the standards are taught using firm strategies and techniques that describe what students should know and do with knowledge and skill, knowledge and skills should not be separated. Schools will assure students meet locally developed standards with the state standards as a minimum. SDE reviews curriculum tied to standards as a service, and gives the districts the responsibility to choose specific materials that they need in their districts. Their focus is to engage the students in actively participating in science by demonstrating command of scientific principles.

Mr. Cook explained that the negotiated rule making committee has been open and transparent allowing all Idahoans to have a voice in the revisions by establishing an accessible web page for comment and opinions, and producing "White Papers" describing the process of the working committee. Over 400 comments were received, and only 17 were negative, which indicated broad support for the revised standards. The challenge has been honoring the science while also honoring the topics of concern voiced in the public comment session, the legislative session, and in the working group. Science is a principled, ongoing inquiry that seeks to explain the natural world through evidence that is replicable and provides a preponderance of support for theories. The two most important theories are, "Human Impact" and "Age of Earth". The revision focus on Human Impact is removing the term, "global warming" with "climate change", including natural causes such as volcanic activity. They also removed the word "significantly" as it relates to human activity impacting climate. The revision focus on Age of Earth entailed removing approximate age of Earth as 4.6 billion years old and replacing it with a constructive scientific explanation based on evidence from rock strata for how the geologic time scale is used to organize Earth's history. They removed specific ages of some rocks, and

defined Big Bang Theory as "current scientific theory of the origin of the universe". Another important change was creating a glossary to guide stakeholder use. An example of this is: Scientific theory equals continual inquiry, gathering of evidence, and validating each theory before it is accepted. As new evidence is discovered that the theory does not accommodate, the theory is modified in light of this new evidence. They have streamlined documents to be about what students should be able to perform and what content they need to know in order to do so. They have removed correlations to other Idaho Content Standards, and removed correlations to engineering practices and cross cutting concepts.

Melyssa Ferro, Science teacher and Co-Chair of the State Department Science Commission, testified **in support** of the new Science Content Standards. She stressed that science is a verb, not a noun. Current standards are a noun, and new standards represent a shift to a verb. Action in the K-12 classrooms that causes the students to become scientists. The new standards provide collaborating and partnerships with neighboring districts and states by sharing resources and teaching both for teachers and students. Idaho has a huge problem with filling science related jobs with Idaho students. The new standards will give the opportunity to have our students be ready to fill those jobs.

Micah Lauer, Science teacher, testified **in support** of the new Science Content Standards. He explained the focus on performance is the strength of these standards. They compel students to learn and demonstrate evidence of their learning by actively engaging with authentic practices of science. The students are tasked with developing and using models, generating, and analyzing data, using mathematical thinking, planning and carrying out investigations, creating evidence-based arguments, and communicating their findings. Performance comes with higher expectations for students and teachers that transform classrooms. Students actually see themselves as scientists with motivation and purpose as they apply science to real situations in class and in the field. Mr. Lauer has created instruction based on the local ecosystem, and developed partnerships with Boise State University and Idaho Army National Guard. This has led to annual field experience for his students at a real research site. Through these new Idaho Science standards the students learn, develop, and know how to use academic skills for the present and the future.

Angela Hemingway, Idaho Stem Action Center, testified **in support** of the new science standards. She explained that science has changed dramatically since the current standards were adopted in 2001, especially with the world of technology that we live in. She expressed the extreme need for updated and current resources, customized text books, and lab manuals for teachers and students.

Superintendent Ybarra, explained the need for extending this temporary rule this year so next year it can be formally adopted as a rule. She explained the need for flexibility in our teaching because of the technical world we live in and that technology is constantly changing, and our students and teachers must be able to master it.

Dennis Stevenson, Office of the Administrative Rules Coordinator, explained to the committee that they would be voting to extend this temporary rule, and next year it would be approved as a pending rule.

ADJOURN: There being no further business to come before the committee, the meeting adjourned at 10:30 am.

Representative VanOrden
Chair

Ann Tippetts
Secretary