Understanding and Using the Vision from the Framework for K-12 Science Education to Improve Science Teaching and Learning

A Workshop for Science Educators

Sponsored by The Utah State Office of Education and Dixie State University

Dixie State University, St. George, UT

December 5 – 6, 2013

Conference Agenda

Thursday, December 5, 2013

Time	Activity/Topic	Location
8:30 – 9:00 AM	**Registration**	HCC 537 Zion Room
9:00 – 9:30 AM	**Welcome and Opening Remarks** • ***Rodger Bybee,*** *Director Emeritus of Biological Sciences Curriculum Study (BSCS)* • ***Sarah Young,*** *State Science Education Specialist, Utah State Office of Education* • ***Nancy Hauck,*** *Dixie State University, Department of Teacher Education* **Overview, Organization, and Goals of Workshop** • ***Brett Moulding,*** *Director, Partnership for Effective Science Teaching and Learning*	HCC 537 Zion Room
9:30 – 10:30 AM	***Vision for K-12 Science Education as Described in the Framework*** *– Brett Moulding*	HCC 537 Zion Room
10:30 – 10:45 AM	**Break**	
10:45 – 12:00 PM	**Breakout Session I (Repeated in Breakout Session II)** 1. Implications of the NRC Framework for Standards and Classroom Instruction – ***Rodger Bybee*** 2. Supporting Science Understanding through Common Core Literacy – ***Arthur Beauchamp,*** *Executive Director, Sacramento Area Science Project* 3. Crosscutting Concepts in Science Performances – ***Brett Moulding*** 4. All Standards, All Students: Making Science Accessible to All Students – ***Jennifer Gutierrez,*** *NGSS Writing Team and Arizona Science Center* 5. Engaging Students in Mathematical and Science Practices – ***Nicole Paulson,*** *Professional Development Leader, Nebo School District*	1. HCC 550 2. HCC 537 3. HCC 535 4. HCC 430 5. HCC 570
12:00 – 12:45 PM	**Lunch** *Sponsored by Delta Education*	HCC 537 Zion Room
1:00 – 2:15 PM	**Breakout Session II (Repeat of Breakout Session I)**	See Breakout Session I
2:15 – 2:30 PM	**Break**	
2:30 – 3:45 PM	**Science and Engineering Practices in the Classroom** – *Brett Moulding*	HCC 537 Zion Room
3:45 – 4:00 PM	**Closing and Reflections** – *Rodger Bybee*	HCC 537 Zion Room

Conference Agenda

Friday, December 6, 2013

Time	Activity/Topic	Location
9:00 – 9:15 AM	**Review of Day 1 and Overview of Day 2** – *Rodger Bybee*	HCC 537 Zion Room
9:15 – 10:15 AM	**Frameshift for the Framework** – *Arthur Beauchamp*	HCC 537 Zion Room
10:15 – 10:30 AM	**Break**	
10:30 – 11:45AM	**Breakout Session III (Repeated in Breakout Session IV)** 1. Aligning Instructional Activities to the NRC Framework – ***Rodger Bybee*** 2. Making Science Thinking Visible by Engaging Students in Speaking and Writing – ***Arthur Beauchamp*** 3. Making Thinking Visible Through Classroom Discourse – ***Ben Gowans***, *Teacher,* Nebo School District 4. Teaching the Nature of Science through Crosscutting Concepts and Science and Engineering Practices – **Adam Johnston,** Weber State University 5. Disciplinary Core Ideas in Science Performances – ***Brett Moulding***	1. HCC 550 2. HCC 537 3. HCC 430 4. HCC 570 5. HCC 535
11:45 – 12:30 PM	**Lunch** *Sponsored by Texas Instruments*	HCC 537 Zion Room
12:45 – 2:00 PM	**Breakout Session IV (Repeat of Breakout Session III)**	See Breakout Session III
2:00 – 2:15 PM	**Break**	
2:15 – 2:45 PM	**Networking, Reflections, and Development of Questions for Panel** – *District Teams and Role-Alike Teams Develop Questions on Standards, Science Education, Professional Development, Assessment, or other topics for the Panel Discussion*	HCC 537 Zion Room
2:45 – 3:15 PM	**Panel: Questions and Discussion on Science Education** – This session will provide an opportunity to pose questions developed in the networking session – *Sarah Young, Rodger Bybee, and Brett Moulding*	HCC 537 Zion Room
3:15 – 3:30 PM	**Closing Discussion: Thoughts, Reflections, and Questions** – *Rodger Bybee and Brett Moulding*	HCC 537 Zion Room