

# Iowa Science Standards

## 2016 Science Standards Immersion Institute

June 16, 2016

West Des Moines Valley High School

#iowascience

WiFi: wdmcs-guest

- 8:30-9:00 Registration
- 9:00-9:20 Welcome, Introductions – Staplin Performing Arts Center (PAC)
- 9:20-9:30 Transition Time to Large Break-out Rooms
- 9:30-12:00 Investigating Phenomenon through 3D Learning  
Unpacking: Analysis of 3D Science Lesson
- 12:15-1:30 Lunch and Informal Networking
- 1:30-3:30 Making Sense of the Iowa Science Standards  
Examining Grade Level Performance Expectations
- 3:30-3:45 Closing and Next Steps

Complete the Survey - <http://bit.ly/28klomL>

Resources:

<https://iowacore.gov/iowa-core/subject/science>

<https://iowacore.gov/content/science-resources>



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## Institute Facilitators



**Brian J. Reiser** is professor of learning sciences at Northwestern University. Dr. Reiser's research examines how to make the scientific practices of argumentation, explanation, and modeling meaningful and effective for classroom teachers and students. Dr. Reiser is a member of the National Research Council's Board on Science Education. He has served on the NRC committees authoring the reports *A Framework for K-12 Science Education*, which guided the development of the Next Generation Science Standards (NGSS), *Developing Assessments for the Next Generation Science Standards*, and *Guide to Implementing the Next Generation Science*

*Standards*. Dr. Reiser has also worked with Achieve on tools to help states implement NGSS. Dr. Reiser is currently collaborating with several state initiatives to design and provide professional development and develop curriculum materials for K-12 teachers to support them in realizing the reforms in NGSS in their classrooms. Dr. Reiser earned his Ph.D. in cognitive science from Yale University.



**Michael Novak** is a 2014 Golden Apple Fellow and National Board Certified teacher, who has taught science, mathematics, and social science in grades 6-8 for over 18 years. He also teaches courses in new approaches to learning and teaching and the high school science methods course in the School of Education and Social Policy at Northwestern University. He has authored instructional units and computational models for high school science classrooms through the Center for Connected Learning at Northwestern

University for the past 10 years, and has worked with partnerships in multiple states to develop NGSS-aligned storyline based curriculum materials. Novak is also a facilitator and member of the design team for the Next Generation Science Exemplar System for Professional Development (NGSX), a web-based professional development system designed to help educators grow in their understanding of three-dimensional learning.



**Mike Fumagalli** is a high school life science teacher and is the recipient of the 2013-2014 Illinois Science Teachers Association Exxon/Mobil Outstanding Teacher of the Year award and is a 2015 Presidential Award finalist. Mike was selected as one of 16 Illinois high school teachers charged with developing 3-dimensional middle and high school units aligned to the NGSS and is one of seven EquIP Rubric-science national trainers. Mike has presented at state and national conferences on the implementation of NGSS and on the development of high quality instructional materials and educators. In addition to his NGSS work, Mike worked with WestEd and the University of Illinois-Chicago on a

disciplinary literacy where he piloted and revised curriculum while evaluating students' ability to obtain evidence from text and engage in argumentation.

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The 2016 Summer Science Standards Immersion Institutes are provided to Iowa educators by the Iowa Department of Education with support from Grand View University's Jacobson Institute for Innovation in STEM Education



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