



6th annual

STEM SUMMIT

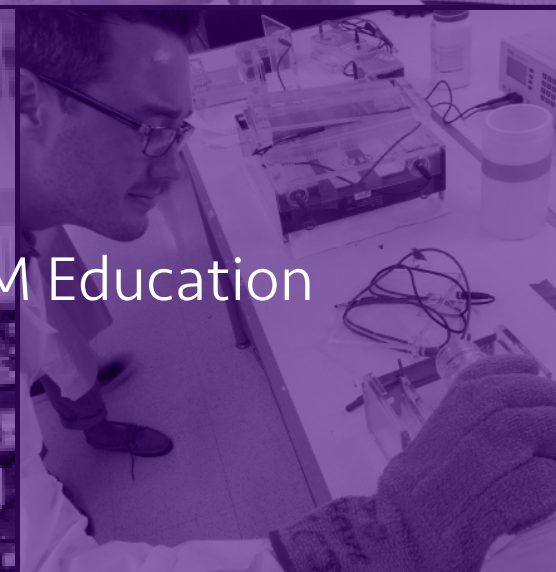
Inquiry ~ Analysis ~ Communication



Final Report

Innovation and Collaboration in STEM Education

Northwestern University



2014

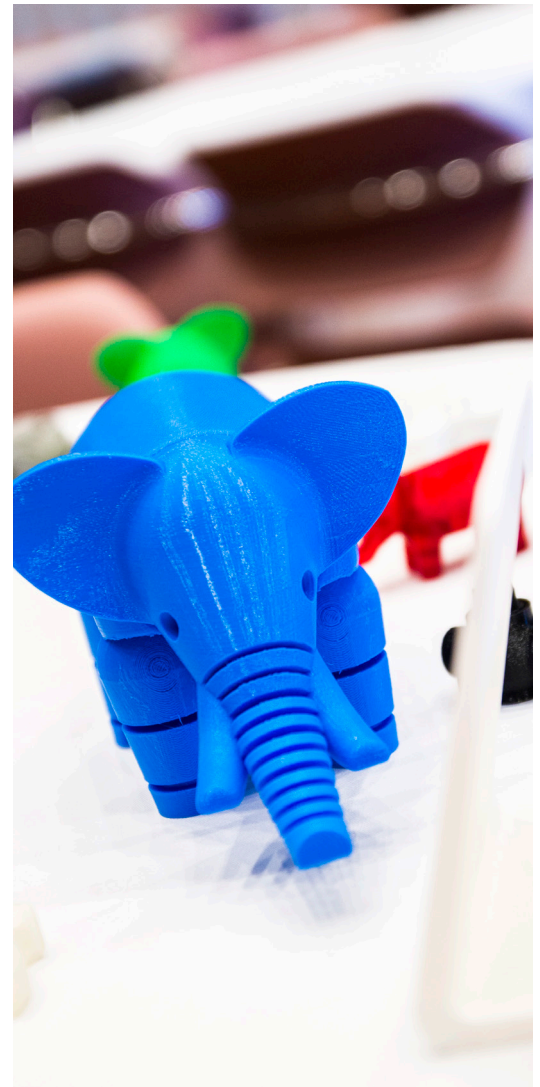
About the STEM Summit



The STEM Summit—Illinois’s only education conference that brings together K12 educators and leaders from industry, and academia—focuses on innovation and collaboration in STEM education. The annual Summit was started and is run as a grassroots effort of education professionals who want to advance and advocate for STEM inquiry in Illinois schools. The Summit also focuses on building the capacity of educators to not only meet but exceed the Next Generation Science Standards and the Common Core Standards for Mathematics and build 21st-century skills and abilities among students. The Summit works to improve and increase student capacity and interest in STEM education and career pathways, as well as bridge the gap between K12, academia, and industry.

Overview of the event

- **271** attendees, including K12 teachers and administrators, university faculty and graduate students, industry professionals, and high school students
- **150** institutions represented: 28 Chicago Public Schools, 83 suburban schools, 8 colleges / universities, and 31 educational organizations
- **32** STEM Education Sessions
 - 1 Keynote Address
 - 2 Plenary sessions
 - 2 Hands-on Design sessions
 - 27 Breakout sessions
- **75** Presenters
 - 10 Northwestern faculty and graduate students
 - 6 Leaders in STEM Industries and National Laboratories
 - 37 K12 Teachers and Administrators
 - 15 STEM Education professionals
 - 7 High School students
- **23** High School student poster presentations on original research, representing 6 area schools



Reactions to the STEM Summit

Responses to Survey Questions

- **89%** of survey respondents were satisfied with the STEM Summit as a professional development opportunity
- **82%** of survey respondents felt eager to learn more about the topics of the sessions they attended
- **77%** of survey respondents were very or somewhat confident that they will integrate what they learned in this workshop into their classrooms
- **84%** of survey respondents were felt that what they learned at the STEM Summit would help them become better teachers

In their own words

~“This was a great overall experience, and I felt that ***I was in a community of highly motivated individuals*** who are interested in what everyone else has to say.”

~“***I came away from the day feeling greater commitment to this effort.*** It was nice to hear others validating the pursuit of STEM education, particularly the students.”

~ “As a physics teacher I am always frustrated by the lack of mathematical reasoning in students who do well in their math classes. ***I now have a way of analyzing their thinking.***”

~ “I will be forming a ***Black and Latino STEM Mentoring program*** at our district.”

~ “I’m excited to coach teachers to build units that are more conceptual and start with a stronger puzzling question / phenomenon that is ***easy to relate to their lives.***”

~“My colleagues and I are ***still talking about what we learned.***”

~“The workshop provided ***diverse perspectives and an opportunity to communicate*** with those who have similar problems to mine and have thought deeply about them.”



ASKING FOR MORE...

“I want more data, tips, and information on **how to attract my black and latino students towards STEM.**”

“The talk from the gentleman who helped derive the NGSS was good for explaining the philosophy, but **more is needed to help teachers with the ‘how’ part.**”

“I was hoping to have **more tangible take-aways** that could be used in instruction.”

“More information on **inquiry-based & interdisciplinary learning.**”

The 6th annual STEM Summit was presented by

The Office of STEM Education Partnerships
osep.northwestern.edu



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The R&D STEM Learning Exchange
www.istcoalition.org/r-d-stem-learning-exchange



*We thank the following for their support of
the 6th annual STEM Summit*



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