



2013 Annual Conference Report

PAESTA

<http://www.paesta.org/>

The Pennsylvania Earth Science Teachers Association (PAESTA) held its first annual conference October 4-5, 2013, at Penn State Brandywine in Media, Pennsylvania. The theme of the conference was ***Mapping Our Way as Educators: Leaders In and Out of the Classroom***. This theme was chosen to connect with the American Geosciences Institute (AGI)'s Earth Science Week theme for the year, *Mapping Our World*. The conference was organized by the PAESTA Executive and Teacher Advisory Committees, and conference registration was free.

The conference began on the evening of Friday, October 4, with a viewing of the PBS/NOVA special *Extreme Ice* (<http://www.pbs.org/wgbh/nova/earth/extreme-ice.html>). The movie was available online for free by PBS and open to not only conference registrants but the general public. The Franklin Institute set up a display table before the movie for teachers to learn about educational opportunities at the Franklin and to sign up for free FI membership (the Franklin Institute received 24 new members from the PAESTA membership). The viewing began at 6PM and lasted approximately one hour. A short post-movie activity involved asking the attendees to write suggestions as to how they might use the movie with their students on green index cards, and to write questions or note confusion about the movie's content on red index cards. The cards were collected for use in a conference session the next day. Approximately 26 people attended this evening session.

The conference began at 9AM the morning of Saturday, October 5. After some welcome notes by the PAESTA President Kelly Hunter, the PAESTA Award for Teaching Excellence was presented to Lauren Beal, a 6th grade science teacher from AMY Northwest School in Philadelphia. The next item on the conference agenda was the conference keynote, given by David Bauman, Science Education Advisor for the Pennsylvania Department of Education. David's keynote, titled *Scientific Thinking in Earth and Space Science*, was shown as a live video stream via a Google Hangout and is uploaded to and archived on YouTube (link can be found at: <http://www.paesta.psu.edu/paesta-conference>).

The conference had three blocks of time defined as Choice Sessions with 30-minute or 60-minute presentations. The Choice Sessions were grouped into three themes – Classroom Practices, Professional Practices, and Mapping Our World. Eleven Choice Sessions were given by twelve presenters (some sessions had more than one presenter, and one presenter spoke twice). Lunch was provided for free with no structured programming during that time. A second conference keynote occurred at the end of the day by Scott McDonald (Penn State) and Theresa Lewis-King (AMY Northwest School) on *Teacher Leadership: In and Out of the Classroom*. The conference ended with an online survey (completed by 27 participants) and raffle.

Saturday, October 5, 2013

	CLASSROOM PRACTICES	CLASSROOM & PROFESSIONAL PRACTICES	MAPPING OUR WORLD
Time \ Room	101 Tomezsko	209 Tomezsko	203 Tomezsko
9:00 - 9:30 AM	Welcome by PAESTA President Kelly Hunter, Teacher Award Presentation		
9:30 - 11:00 AM	Morning Keynote - Scientific Thinking in Earth and Space Science		
11:00 - Noon	"What's Your Evidence?" Pushing students toward stronger scientific explanations using the Claim-Evidence-Reasoning framework	Authentic Earth and Space Data in the Physics Classroom (30 min) From The Birth of the Universe to the Birth of the Planets: How did we get here [and how do I teach it]? (30 min)	An Interactive Web Mapping Application - Harnessing the Power of Spatial Data and Maps
Noon - 12:45 PM	Lunch		
12:45 - 1:45 PM	Scaffolding Claims, Evidence and Reasoning in the Middle School Classroom	A School Garden as an Outdoor Classroom (30 min) Grant Writing (30 min)	Using Geospatial Tools in PA Earth Science Classrooms
1:45 - 2:15 PM	New Horizons Encounter with Pluto: Coming in 2015!	Invitations and Barriers Teacher Leaders Encounter in Curriculum Reform	Using "Extreme Ice" in the Classroom
2:15 - 2:30 PM	Break		
2:30 - 3:45 PM	Afternoon Keynote - Teacher Leadership: In and Out of the Classroom		
3:45 - 3:55 PM	Survey 105 Tomezsko		
3:55 - 4:00 PM	Raffle and Closing Remarks Tomezsko Lounge		

Fifty-two people attended the conference, supported by three staff members handling registration and providing conference participants with internet access. Including the conference-wide sessions (including the plenary speakers), the following table is a breakdown of the affiliation of the presenters:

Penn State affiliation (faculty, student, staff): 3 individuals
 K-12 teachers: 10 individuals
 Other professional affiliation: 2 individuals

Conference website: <http://www.paesta.psu.edu/paesta-conference>

Full conference schedule (with session descriptions and supporting files):
<http://www.paesta.psu.edu/paesta-conference-2013-schedule>

Report submitted October 2013, completed by Laura Guertin