

**COSMOS-CTLT**  
**Research in Science and Mathematics Education Learning Community**  
**Thursday, March 20, 2008 ~ 12:00pm–1:30pm**  
**140 Life Sciences Bldg**

Attendees:

- |                       |                           |
|-----------------------|---------------------------|
| 1. Cindy Bertelsen    | 14. John Laird            |
| 2. Ann Bragg          | 15. Steve Langendorfer    |
| 3. Mohammed Darabie   | 16. Neocles Leontis       |
| 4. Emilio Duran       | 17. David Meel            |
| 5. Lena Ballone Duran | 18. Stephania Messersmith |
| 6. Jude Edminster     | 19. Bob Midden            |
| 7. Daria Filippova    | 20. Julie Nurnberger-Haag |
| 8. Adriane Hamby      | 21. Rich Oldrieve         |
| 9. Jodi Haney         | 22. Matt Partin           |
| 10. Mandy Heddle      | 23. Amy Scheuermann       |
| 11. Rosemary Irons    | 24. Karen Sirum           |
| 12. Chris Keil        | 25. Eileen Underwood      |
| 13. Dale Klopfer      |                           |

Minutes:

I. Announcements

- a. Jodi: The research community will be meeting on May 1.
- b. The COSMOS website is up and running. To find the research community go to [http://cosmos.bgsu.edu/communities/research\\_community](http://cosmos.bgsu.edu/communities/research_community). On this site you will be able to find the minutes as well as the mid-year evaluations, annual report, links to videos and journal achieves as well as notes from last semester. Look for it to be more organized next fall.
- c. A congratulations goes out to Emilio and Lena for getting a grant for TEAMS—\$733,000. They have raised 3.2 million dollars in the past 7 months!
- d. The next couple of large group meetings will be presentations by Matt Partin and his group presenting on biology student motivation. On April 3 Rich Oldrieve and his group will have preliminary results to share. Jude will give a presentation on ethnographic research. Mandy and Stephania will be presenting about science education research.
- e. Small group reports:
  - i. Chris: Visited the Moldova Academy of Science and Moldova University. The city is mostly small and poor. Chris gave the students and faculty lots of workshops and classes on hands on minds on. There were over 100 students and faculty in attendance and they were given information on science teaching in the U.S. Some of the students and professors were enthusiastic but some were threatened. They thought that they might not be graded fairly if they were graded on a project. Most of the instruments and tools

that Chris brought to use in the workshops cost more than what the professors make in two months, so the supplies that they have are limited and the students are not able to use the equipment; they are only able to watch as the professor demonstrates.

- ii. Jude: Students at BG in geology using traditional field notebooks/ Michigan students using digital field notebooks.
- iii. Dale: What students know about vectors.
- f. Farewell to Rosemary Irons, visiting professor in math from Australia.

## II. Large Group: Presentation by Neocles Leontis

- a. PowerPoint: *Atoms in Motion: Constructivist Approaches to Connecting the World We See to the World We Don't, Using Dynamical Simulation.*
- b. Neocles uses a program with his science classes to give them an interactive picture of the concepts that he is teaching in his class. This website can be found at [Mw2.concord.org](http://Mw2.concord.org)
- c. Talks during and after the presentation came up with ideas/concerns: We need to think about under what circumstances do you use it, how do you use it, when is the best time and way to use it? How can we start a pilot project/cohort? We need to show evidence and support. Please think of ideas to get this going.

## III. Small Groups

- a. Jodi and Matt met to discuss their small group research project and prepare for Matt's upcoming presentation on behalf of their group.
- b. Dale and John met to discuss their research on vectors.
- c. Mandy and Stephania met to discuss fundamentals of science education.