

**PhysTEC-Colorado
Teacher Advisory Group (TAG)
15 March 2005**

Attendees:

Chris Keller	Noah Finkelstein	Valerie Otero
Trish Loeblein	Beth Kovacs	Mike Dubson
Bud Talbot	Mick Fuchs	Steve Pollock
Heather Miller	Steve Reeves	Steve Iona

2005-06 PhysTEC Fellows:

- Trish Loeblein – working with PhET Project
- Steve Reeves – working with PhET
- Elias Quinn – working on a manual to help CU students (LAs, TAs) regarding contacts, protocol, and procedures for visiting schools and informal science centers.

2005-06 PhysTEC Teacher in Residence:

- Mike Fuchs – working with Mike Dubson on undergraduate laboratories

Summer 2005 STEM Teacher Workshop:

- June 13-16 (note: one day longer)
- Will include prior attendees for the last 1.5 days and for special presentations.
- Will offer more content-based sessions.
- Suggestion to take poll of last-year participants now (in Spring) so that we get long-term perspective on the worth of the workshop.
- Suggestion for the long sessions that are domain specific (eg. Tutorial in physics) be for just the teachers in that area. Otherwise, short description that are for everyone.
- Word of mouth is good advertiser—teachers value the program --- esp. versus other forms of in-service work that has been conducted.

PhET Sharing:

- There is a need for a simulation on electrical transformers – [just came on line]
- The most often used simulations included: Trajectories, Circuit Construction Kit, Mass on a Spring, Waves on a String, Moving Man
- Not all schools have high-end computers. Therefore, there are java issues, resolution issues, browser issues, and memory issues.
- It is not always easy for teachers to schedule the use of computer lab. Often there is a month-long delay in getting in.
- There was some discussion of more simulations that match actual laboratory experiences.

Advantages/Impact of the TAG:

- The PhET staff seems very responsive to suggestions for changes in the simulations.
- Teachers can now share the names of CU faculty with students.
- One TAG member completely changed her perspective of CU from one with a negative bias to a very positive perspective as a result of the summer workshop.

- Teachers value students from CU showing up to their classes.

Questions/suggestions:

- How will we find high school teachers who have an interest in Astronomy? (for STEM workshop)
- How can we expand the number of mathematics teachers who participate?
- Suggested topics: careers in science, research project results, Research Experiences for Teachers (RET)
- TAG members should be invited to STEM Open Houses and Poster Sessions.

University – HS collaboration:

- There was a genuine interest in having LAs and/or TAs visit high school classrooms. Topics of interest varied from performing/supervising a lab experience, demonstration show, PhET lesson, and PowerPoint sessions on what is it like to be a CU student.
- There was also interest in a variety of time frames for the visitations: 1 week, 1 day, 1 hour.
- Any level of involvement would be beneficial to high school teachers and CU students.
- STEM should expand its point of view regarding teacher recruitment to include high school students via the TAG and school visits.

Future physics related meetings:

- American Physical Society-Four Corners Section at CU in October 2005
- American Physical Society-Division of Plasma Physics: Teacher Day and Student Expo in Denver in October 2005
- American Association of Physics Teachers National Meeting in Salt Lake City in August 2005
- Physics Education Research Conference in Salt Lake City in August 2005

Miscellaneous

- Harbor Freight (<http://www.harborfreight.com/>) has extraordinary deals on digital multimeters.
- We should hear a report on the Applied Physics Class at Stanley Lake High School

Steve Iona
March 2005