

PTRA Oversight Committee Meeting Minutes
Tuesday January 8, 2013 7:00-8:30 AM
Onward Room-Hyatt Regency New Orleans

Committee Members:

Pat Callahan (Committee Chair), Deborah Roudebush, Elaine Gwinn, Keith Clay, Steve Shropshire

Absent - John Roeder, Lillian McDermott

PTRA Director: Karen Jo Matsler

Executive Office: Beth Cunningham, Bob Hillborn, Janet Lane, Tiffany Hayes

Friends of Committee in attendance: Tom Haff, Gay Stewart, Bob Powell, Ann Robinson, Jim Nelson, John Layman, Duane Merrell, George Amann, Jack Hehn, Sharon Kirby, Gary Taylor, Suellen Cedergreen, Tommi Holsenbeck, Damian Pope, Trina Cannon

Meeting was called to order at 7:00 AM by Pat Callahan, chair.

1. After introductions of members and guests was completed Karen Jo Matsler offered the following as goals for the PTRA program:

PROPOSED LONG TERM GOALS

- Recognize AAPT as the leading expert to provide professional development in physical science for K-12 teachers in physics, physical science, and STEM.
 - Resource for pedagogically sound, research based curriculum and assessments.
 - Connect high school physics teachers to the AAPT community; increase the number of HS teachers in AAPT
 - Have a day at the summer AAPT meeting designated for pre-service professional development. Have PD integral part of AAPT and the meetings.
 - Have regional PD provided by AAPT members; use regional meetings (i.e. similar to NSTA regional conferences)
 - Develop/maintain cadre of master teachers who provide effective PD for peers
- ✓ Discussion among attendees encouraged a strong focused program as many in the field are thirsty for professional development. The PTRA program provides a wide group of professionals whose talents need to be utilized. Some discussion was held concerning renaming the program, PTRA presently has name recognition, it may be useful to include the term professional development in any new name.
- ✓ Deborah Roudebush suggested that the goals listed above should be narrowed to a mission statement followed by about three bulleted items to highlight the single most important goal for the program. The group agreed to work on a mission statement soon and consider any changes in name of program.

2. Karen Jo Matsler then presented the following objectives for the program in order to begin implementation of the goals:

Objective 1-Long Term: Develop a long-term professional development plan identifying AAPT as the leading expert in providing PD for physics teachers.

Action: Identify effective components of current model and modify/adapt to a model that is self-sustaining, nationally recognized, relevant, and vibrant.

- Designate a small cadre (12 members) to focus on designing a blueprint for future AAPT professional development.
- Participants will have specific roles of expertise to contribute.
- Meet for 1-2 days and complete work electronically
- Estimated cost \$15-\$20,000.
- Talking Points
 - Pedagogy based on Research
 - Engineering
 - Math i.e. link to CPM
 - Technology

✓ **After discussion of Objective 1 the committee voted unanimously to approve the use of funds (estimate \$15-20,000) from the PTR A Continuation Fund to support the formation of a group to develop a long range plan.**

✓ **The committee also asked that the PTR A Director present periodic progress reports concerning meetings of the group and subsequent long range plans.**

Objective 2—Transition: Develop materials (engineering, technology¹, and literature) to be infused into current curriculum modules with the assistance of 20-25 master teachers. The 20-25 master teachers would meet 3 days before the 2013 summer AAPT meeting.

- Must be member of national AAPT and have registered to attend full meeting before attending.
- Open registration to surrounding physics teachers. Pay and come just as if they were attending their own PD.
- Participants or schools must agree to support/implement and partially fund expenses for those attending. Suggest AAPT pay only for travel, up to \$600/person.
- Participants must help getting online resources and curriculum developed (i.e. develop modules)
- Presenter expense will be paid with the expectation that a manual develop for use in workshops. This manual may be in draft format and revised during the summer meeting with input from participants. Presenter will be paid upon completion of the manual.
- Projected expenses \$40,000.

✓ **After discussion of Objective 2 the committee voted unanimously to approve the use of funds (\$40,000 projected) from the PTR A Continuation Fund to support the summer “pre” meeting program.**

✓ **An application will be developed, it was suggested that there be an attempt to infuse “new blood” into the PTR A program.**

¹ Technology refers to simulations, iOS devices, apps, etc

- ✓ Plans are to use current Kinematics materials as foundation for summer program and expand materials to include items such as literacy, technology and engineering design.
- ✓ For informational purposes Beth Cunningham shared that the PTRA continuation fund currently has a balance right around \$200,000, so money is available, the committee's goal is to make sure it is being used wisely.
- ✓ The following was offered as a possible model for summer meeting:

Elementary/MS Focus

- Learning cycle on energy conversion
- Literature "The boy who harnessed the wind"
- Participants experiment or develop concepts on basic circuits (after they have done content)
- Participants construct windmills, build wind farms in series and parallel, and extending the application of the book determine the best combination to light bulbs and to pump water.

Secondary Focus

- Integration of apps and engineering to kinematics
- HS content + integration of technology (iPads, simulations), projects

Engineering Focus

- Applications in engineering

3. Discussion then turned to efforts to obtain grant funding for future PTRA projects. Since NSF requires that grant proposals include a research component Karen Jo Matsler offered that the research component evaluate the effectiveness of different modes of delivery of professional development. The following three formats were explained:

Potential Formats for Grants

- 1) Summer 2 weeks (70 hours instruction + follow up (15-30 hrs) with one content +STEM emphasis. Non-residential (35 hrs/week if teachers drive in). Could video tape these sessions for the online sessions.
- 2) Blend = summer + follow up (virtual), interaction, postings (documentation of curricular changes), video clips, webinars, walk thru or snippets, video reflections of teachers emailed to teachers and "you view" video - meet with someone else to look at video reflections. Have students video tape about 5 min on what is going on in class. Can't be attached to an evaluation or attached to an administrator. Need evaluation protocol
- 3) Virtual only - Two days in summer to teach them how to use online resources, develop collaboration among peers. One day will give pretest. OR make totally online. Do post tests at certain "hourly" intervals (i.e. 40 and 80 hrs) Deadlines for content just like in a class. Use timed and secure test.

Potential Evaluation Components:

- Must use curriculum for all that is aligned and consistent
- Pre and post assessments at regular intervals
- Document classroom practice and changes
- Document student impact
- Portfolios—lab work, self-evaluation, teacher portfolios

- Students pick what they think is their best and their worst and kids have to write why it is best or worst
 - Video vignettes showing classroom practices/technology
 - Protocol checklist
 - Online streaming or DVDs
 - Moodle
 - Conference phone calls/skype/videochats/facetime/webinar
- ✓ Gay Stewart suggested that the NSF research question would need to show impact on student test scores. She also offered that we need to be “ambitious” in the “right way”, it is difficult to gather evidence concerning student progress.
 - ✓ It was discussed that state MSP grants would be easier to obtain if tied to math standards. Jan Mader reported participants from failing schools had passed AYP after teachers had participated in similar programs in Idaho, so there is a method to gather evidence of student progress.
 - ✓ Beth Cunningham indicated that it could be advantageous to build relationships with other AIP organizations. We need to convince others that PTRA is the best source of physics professional development and organizations should consider PTRA to assist in outreach components for grants.
 - ✓ Karen Jo Matsler solicited assistance in grant writing from others such as Gay Stewart, Bob Hillborn, Keith Clay, etc.

4. Review of current and/or recent programs with PTRA involvement.

- ✓ Apex Grant – Alabama – Jim Nelson reported on PTRA’s role as partner in this grant designed to establish 11 centers across the state with Physics specialists providing professional development. Funding is for 5 years and includes \$750,000 PTRA budget. Each summer will include 2 weeks, adding more teachers each year. Follow up sessions will be scheduled during school year.
- ✓ West Georgia – Bob Powell reported that he has received a grant to continue the program that had previously been funded. The grant is an Improving Teacher Quality Grant (ITQ). West Georgia has used Ann Robinson, Sharon Kirby and David Todd as workshop leaders. He has had to be creative in using the PTRA leaders in that Georgia requires workshop leaders be faculty members. Upper elementary and middle school teachers are the targeted group. Resources developed by Jan Mader for Idaho could possibly be used for West Georgia.
- ✓ Frostburg – Maryland – Jim Nelson reported that additional funding has been approved to continue workshops at Frostburg. The grant will pay \$18,000 to AAPT for PTRA assistance in presenting workshops, the plan is to do CASTLE curriculum during the summer and follow ups.
- ✓ Towson – Maryland – Pat Callahan reported that he and Dave McCachren had provided leadership for workshops during the summers of 2011 and 2012 for middle school teachers in the City of Baltimore. Workshops were well received. Towson did not seek additional grant funding citing lack of cooperation with Baltimore City school administration. Jim Nelson had talked with Towson leadership to think about impact program has had on students.

- ✓ Idaho State- Steve Shropshire reported on the ongoing funding he has received from MSP grants. The Idaho State program has focused on grades 3 through 8, with the bulk of the program in grade 5. They target schools that are failing AYP. The continuing workshops have shown gain in student achievement.
- ✓ Oklahoma – Karen Jo Matsler reported on the program that Steve Maier has organized. Brian Lamore is the Lead PTRA and it was reported that he keeps things up and going and has shipped equipment for student use across the state. Beth Cunningham included information that the OK program is focused on getting teachers certified to teach Physics.
- ✓ Arkansas – Gay Stewart reported that the state MSP funding has dropped off and she is in the final year of an NSF grant. Preliminary data looks good and is tracking how many students take a higher-level course and how they do on AP tests. Three workshops were done this year including CASTLE.
- ✓ Quarknet – At the summer meeting Karen Jo Matsler, Pat Callahan, George Amann, Elaine Gwinn and Deborah Roudebush met with Quarknet leaders and arranged to have a “summit” meeting this past fall. George Amann, Evelyn Restivo, and Steve Shropshire were involved in the meeting as PTRA representatives. A preliminary proposal was developed that would seek funding for a 5 year program, PTRA would be involved during the first three years to improve the content knowledge of teachers considered unprepared to enter the Quarknet program, Quarknet would then pick up the last two years of training for participants. Next step is awaiting current political atmosphere to settle before submission for unsolicited funding. Funds were approved for PTRA involvement in meetings and some money is still available, Steve indicated that future meetings were planned to be online.

5. Beth Cunningham reported that a number of donations had been received by AAPT in memory of Larry Bader, former co-Director of the PTRA program. These donations have been added to the PTRA continuation fund.

6. Karen Jo Matsler indicated that the PTRA program can be made more visible with a good website and presence in popular social networking sites. It was suggested that we seek assistance from specialists in these areas to develop such a presence. It was suggested that the committee consider approving funding to assist in the development of these materials.

The meeting was adjourned at 8:30 AM

Respectfully Submitted by Pat Callahan, Committee Chair