

PTRA Oversight Committee Chair Report W21
12/18/20
Jill Marshall, Chair

PTRA has had a good year, with many successes, in particular the Quantum Initiative sessions at SM20, and much reflection on how we move forward toward sustainability. The PTRAs Director's Report (Appended) details the challenges and PTRAs accomplishments.

Status of the PTRAs Continuation Fund (CF)

Jan. 1, 2020	155,386.47
Jan. 1, 2019	166,669.30
Jan. 1, 2018	183,454.12
Jan. 1, 2017	231,524.52

It is our understanding that PTRAs has a mandate to become 'sustainable' by the end of 2021. The OC has interpreted sustainability as maintaining (on the average) the current balance in the CF (~\$155,000), meaning that expenses match income. The OC has taken some actions toward that end, including charging a registration fee for attendance at the Summer Institute. Other possible moves toward sustainability we propose:

1. Requesting that the PTRAs CF be moved in the LTR (rather than short term reserves).
2. Creating new digital materials that could be self-published and sold at a much more accessible price for high school teachers.
3. Investigating the possibility of allowing direct donations to the PTRAs CF.

Motion: *The PTRAs Oversight Committee requests a Board motion instructing the AAPT CFO Michael Brosnan, in consultation with the Treasurer, to move as much of the PTRAs Continuation Fund as deemed financially feasible into Long Term Reserves (opposed to Short Term Reserves where it currently resides.)*

Motion: *The PTRAs Oversight Committee requests a Board motion instructing the AAPT CFO Michael Brosnan, in consultation with the Treasurer, to investigate the possibility of making donations directly to the Continuation fund (as opposed to the PTRAs operating budget) in a move toward creating an endowment.*

These measures would help to balance income and expenses, but we are unsure that we will reach the sustainability goal, even with these measures in place, if we continue the Summer Institute in its present form. We see several options to address the shortfall:

1. A dramatic change in the summer institute- either to online or university-sponsored FtF.
2. A commitment from AAPT to sponsor the institute as part of its service to HS teachers [provided the PTRAs leaders run workshops in their local area].
3. Re-establishing PTRAs as an affiliate to AAPT rather than an AAPT cost center.

The process of establishing an independent 501C3 would of course require a transfer of the Continuation Fund monies to the PTRA affiliate organization.

Motion: The PTRA Oversight Committee requests a Board motion committing up to \$20,000 per year of AAPT funds to the PTRA operating budget in recognition of the contribution made by PTRA volunteers to high school offerings at meetings, etc.

PTRA Oversight Committee Report
Karen Jo Matsler, Director
December 15, 2020

Due to COVID, there was no F2F meeting in July 2020, however we did meet virtually using the format similar to the normal PTRA summer institutes in that we used the week prior to AAPT (July 13-16).

The week focused on providing online sessions similar to what we would have done F2F. Although it was sad to not be together in person, it was nice to have PTRAs join us who had not participated in the past due to other obligations, travel expenses, or schedule conflicts.

The morning sessions focused on repeating content from prior quantum sessions. Those who had missed sessions had a chance to catch up and those who were at the sessions got a “second dose” (as we know it often takes more than once).

The afternoon sessions were presented by PTRAs who volunteered to present a topic of their choosing. The presentations were diverse in the audience and the topics, but all were very well done, especially considering it was the first time we had tried to do this. The intent of the afternoon presentations was to start a compilation of ppts and activities that could be used by teachers during online teaching. This effort is included in several parts of the PTRA strategic plan. We discovered there were lots of challenges, some of which included:

- Length of the lesson
- Ensuring students had all of the equipment at home
- Teacher notes/background
- Copyrights of materials used and materials made
- Internet access/bandwidth
- Engagement
- Alignment with learning cycles and appropriate pedagogy

Some of these issues were discussed at the OC meeting on Wednesday July 15

All sessions were advertised through eNNOUNCER and listservs. Anyone was welcome to join at no cost. It should be noted that there was high demand and attendance had to be cut off once when registration exceeded. Feedback from the sessions was generally positive with some constructive suggestions as to how to improve the lessons.

- Mario Belloni is helping with some of the edits and formatting. We appreciate his help and insights, especially since he is a published author.
- We have a designated PTRA YouTube Channel we can use to post them.
- Money was allocated at the summer meeting to help pay PTRAs to make more of the ppts.
- The issue of copyrights and how much to charge for the resources is still in question. We understand that publications that go through AAPT will no longer be designated for PTRA funds due to the switch to AIPP.

Presentations by PTRAs in 2020 based on attendance surveys given at the workshops.

Date/Location	Presenter(s)	Topic	Participants
AAPT, Jan 19	Matsler/Pope	Making Fields Real	16
Alabama, Feb 8	Holsenbeck	Make-n-Take	13
Pennsylvania, Nov 7	Flarend, Callahan, McCachren	Radioactivity	7
Pennsylvania, Nov 14	Flarend, Callahan, McCachren	Radioactivity Part 2	8

- 60% of the attendees were high school teachers
- 34% were TYC and University
- 6% were Middle School
- 20 participants filled out the post survey form and all responded that sessions were well planned, time was properly allocated, topics were beneficial for students, and the information was appropriate. Thanks to all of those who provided the sessions, we appreciate it and know the participants appreciated your efforts.

Summer Institute

Date	Time (Central)	Session Title	Presenter	# Registered
Monday	9:30 AM	Welcome	Matsler	
	10:00 AM	Malus Law	Davies	56
	1:00 PM	Sound for Elementary	Nancy Easterly, Ann Robinson	19
	1:00 PM	CASTLE (for PTRAs only)	Larry Cook	13
	2:45 PM	Energy Conservation	Elaine Gwinn, John Roeder	30
	2:45 PM	Kinematics for Elementary	Nancy Easterly, Ann Robinson	17
Tuesday	10:00 AM	Uncertainty Principle	Matsler	56
	1:00 PM	Impulse and Momentum	Rhianna O'Rand	30
	1:00 PM	TIPERS	Steve Henning	11
	2:45 PM	Waves and Vibrations	Nina Day	33
	2:45 PM	Kiddie Lit	Tommie Holsenbeck, Bill Reitz	10
Wednesday	10:00 AM	Quantum Security	Flarend	57
	1:00 PM	Electrostatic Interactions	Katya Denisova	22
	1:00 PM	MS Force and Motion	Janie Head	19
	3:00 AM	Oversight Committee	Matsler, Marshall	57
Thursday	10:00 AM	Quantum Cryptography	Alice Flarend	56
	1:00 PM	Interactive Demos	Steve Henning	28
	1:00 PM	Ranking Tasks	Tom OKuma	16
	2:45 PM	PTRA Debrief	Matsler	58

