

Graduate Education Conference, Friday Evening Panel.
Michael Thoennessen (AAPT):

The AAPT plays a special role in graduate education. The two competing aspects of a broad education in basic physics and the pressure of the research groups to get the students involved in research as soon (and as long) as possible have to be balanced. The AAPT involvement focuses on changes in the graduate curriculum to ensure a broad physics education for the students.

Communications, information fluency, training in teaching, and ethics issues were mentioned in the AAPT/APS task force report as important component of graduate education. Ideally, scientific writing, presentations and information fluency should be taught in college and incoming graduate students should be expected to have these skills. Incoming graduate students are expected to teach, however, only very little effort is typically spent to prepare them for this task. It is obvious for the AAPT to support the development and dissemination of programs or teaching modules to help graduate students to learn how to teach. Similarly research ethics should be required to be taught to all graduate students.

The AAPT/APS task force concluded that the core curriculum has not changed in any significant way in a long time. It is true that the names of the core courses have not changed, however, the committee did not comment on the content taught in these courses. A follow-up study on how the content has changed would be useful. In addition, the long tradition of the AAPT in physics education research is a valuable asset to apply also to the way graduate courses are taught.

Finally, the report strongly suggests developing guidelines of graduate students' rights. These guidelines should also include expectations of the graduate students as well as of the professors. It is sometimes surprising that the students just don't know some of the basic expectations, however, at the same time professors assume them to be common knowledge.