

Statement on Significant Professional Activity
St. Olaf College Physics Department
Revised, October 2004

Professional activity is understood by the Physics Department faculty to be the means of assuring our long-term effectiveness as scientists and teachers.

We see involvement in research as the primary focus of professional activity. In light of our understanding of the close connection between professional activity and our teaching mission, the Physics Department places particular value on research projects that are structured so as to include undergraduate students as collaborators. The most traditional measure of professional activity, and still considered the best, is the publication of new primary information in recognized professional journals. Published articles would report on experimental or theoretical studies in physics or applying physics to interdisciplinary problems. Receipt of grants to support research is a useful indicator of such activity, and funding awarded by external agencies is an indication that the proposed research is seen as having significant value by the profession. It is generally recognized that a significant new venture may require a substantial investment of time before yielding publishable results. In some cases a series of publications can result from repetition of essentially the same measurements or calculations; here an evaluator should look for innovation and refinement of approach as evidence of growth. Presentation of new results at professional meetings is an important indication that research work is ongoing and of interest to the larger community. In most cases such a presentation or a combination of such presentations could be expected to lead to a peer-reviewed publication. Presentation of an invited lecture at a professional meeting normally indicates that an individual's work over a period of years is widely recognized in the profession.

A second area of professional activity, one that is likely to have a more obvious relationship to teaching effectiveness in the short term, is the development of modernization of courses or experiments. As long as these activities represent original approaches or adaptation of new ideas from the technical literature, they should be considered as indicators that the individual is keeping abreast of current developments relevant to the physics curriculum. Major pedagogical or technological improvements can have a significant positive impact on the teaching program of the whole department and should be valued as such. Grants supporting such work or publications describing it would be evidence of its recognition beyond the college.

We value a range of professional activities generally related to our public responsibilities as scientists though with less importance than those described in the previous paragraphs. These include holding office in professional societies, chairing sessions at professional meetings, participation in review panels (for example: NSF, external department evaluations, or professional organizations), reviewing manuscripts for publication, doing book reviews, consulting in industry, testifying before legislative bodies, attending summer short courses or workshops, and similar activities. Presentation of scientific topics, or issues growing out of the application of science, to departmental or general audiences needs to be encouraged and given some recognition as valid professional

activity. Attendance at professional meetings, visiting with scientific or industrial research groups, or similar activities focused on staying current in the discipline should be given some recognition though less than the other categories already described.

The question of evaluating quantity of results of professional activity can be difficult to assess. One publication, for example, could represent the outcome of several years of sustained effort or as little as a few days commenting on a problem raised by another article. The degree of effort involved should therefore be factored into evaluating the outcome of professional activity. For faculty with full teaching load, we consider the norm for time spent on professional activity per year to be the equivalent of about two-and-a-half months full-time.

Some special attention should be given to the work of the department chairperson. Much of the load comes at the expense of professional activities that have been mentioned here. Nevertheless, in a very important way his or her activities can be contributing to the effectiveness of instruction in the department and to the investments that determine the long-term viability of the department.