

Mr. Daniel M. Hull  
President  
Principal Investigator for STEP II  
CORD  
601 Lake Air Drive  
Waco, TX 76710

Dear Mr Hull:

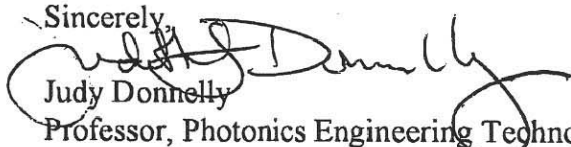
I am pleased to write in support of the CORD proposal to the National Science Foundation for STEP II. As the program coordinator of Connecticut's only A.S. program in Photonics Engineering Technology, I am aware that the photonics industry is one of the fastest growing both nationally and internationally. In order to stay competitive in a global economy, the number of community colleges throughout the United States teaching this new technology must be increased.

As we learned in beginning our own program several years ago, there is a lack of curriculum materials appropriate to community college students, which the STEP II program would address. Although increased interest in fiber optics has created a number of A.S. level texts for telecommunications, we have found NO materials to support the teaching of optics, lasers and photonics applications. The new materials, particularly the additional 30 modules of the STEP II plan, would be filling a void for programs like ours, and would stimulate the formation of new programs.

A second obstacle to beginning a photonics program is the lack of instructors educated in optics/photonics. For years, optics has been the "step child" of physics, so that even physics majors have graduated with little or no exposure to the subject. The situation is worse for high school teachers, whose only physics courses may be of an introductory nature where the emphasis is on mechanics. Through our work with the NSF-ATE supported PHOTON project we learned that teacher professional development is a crucial element to be addressed in photonics education. The STEP II program addresses this as well.

I look forward to serving on the Educational Working Group and to lend my expertise based on 23 years of physics teaching at the community college level (the last 6 exclusively in optics/photonics). Please let me know if I can provide any additional information or assistance.

Sincerely,

  
Judy Donnelly  
Professor, Photonics Engineering Technology