Translating the principles of BIO2010 into practice.

The University of Queensland in Brisbane, Australia is a large, research-intensive institution. A recent review of the Bachelor of Science, which was strongly influenced by BIO2010, resulted in a more quantitative program. While our academic staff supported the underlying message of BIO2010, the translation of this message into practice has been challenging. This challenge has been exemplified in the development and implementation of a new first year course, SCIE1000, which is taught to over 500 students. The course aims to demonstrate 1) the interdisciplinary nature of science; 2) how mathematics underpins various scientific disciplines; and 3) the role of computational modelling in scientific research. This talk will focus on materials developed for this course. Additionally, materials will be presented and discussed in the context of how these were developed, how students perceived them, and how students performed when using them. The challenges of creating an interdisciplinary (mathematical/computational/general science) course will be explored with insight into the types of academic development opportunities that aided the course coordinators. Finally, details will be provided on how participants can access more of the materials used in SCIE1000. (Received September 16, 2008)