

Selecting and Adapting Digital Learning Resources for Science, Mathematics, Engineering and Technology Education

Brandon Muramatsu

NEEDS and SMETE Digital Library Project Director
University of California, Berkeley

As we enter the 21st century the pace of development of web-based and web-accessible collections of learning materials for science, mathematics, engineering and technology continues to accelerate. However, when confronted with the wide array of potential resources it is often left up to the individual faculty member to decide how to select and use these materials. NEEDS, an educational digital library in engineering education, and the SMETE Open Federation are leading the development of a new breed of digital libraries for education. These educational digital libraries will focus on supporting and encouraging a community of practice as much as emphasizing technology and individual learning resources.

Through this seminar we will discuss some of the latest developments in educational digital libraries, as well as outline a set of mechanisms and methodologies to help faculty better locate, select and evaluate digital learning resources. We will discuss different types of selection criteria and methods for evaluating digital learning materials and technologies. In particular we will highlight the *Premier Award for Excellence in Engineering Education*.

Brandon Muramatsu is the Project Director for the SMETE.ORG and NEEDS educational digital libraries at the University of California, Berkeley. Mr. Muramatsu is a lecturer in multimedia at UC Berkeley and directs the Berkeley Instructional Technology Studio, where he consults with faculty and graduate students on the use of technology to enhance learning. Recently, Mr. Muramatsu helped launch the University of California Teaching and Learning with Technology Center, a center without walls showcasing the innovative instructional materials developed at the University of California. He is an active member of the executive committee of the San Francisco Section of the American Society of Mechanical Engineers. Brandon Muramatsu earned a B.S. (1993) and M.S. (1995) in mechanical engineering from the University of California, Berkeley. He also earned a Management of Technology Certificate from the Haas School of Business and College of Engineering at U.C. Berkeley.