



**1995-2004**      **University of California, Berkeley**

1998-2004      *Project Director, SMETE.ORG*

Responsibilities:

- Supervise the team developing the Federation's main portal at [www.smete.org](http://www.smete.org).
- Lead the development of the SMETE Open Federation with over thirty university, educational organization, professional society and industry partners.
- Work closely with partners, including: the American Association for the Advancement of Science, Eisenhower National Clearinghouse for Mathematics and Science Education, the iLumina Digital Library project, Math Forum, the Mathematical Association of America's Math Digital Library, MERLOT, Project Kaleidoscope and Utah State University, to integrate their individual collections and services into a cohesive whole.
- Consult with partners on the development of educational digital libraries.
- Grow the SMETE Open Federation by identifying new organizations with which we can work on collaborative projects.
- Author, manage and administer grants and budgets for the SMETE Open Federation.
- Develop the Open Federation's organizational and administrative structure at the University of California, Berkeley.
- Develop specifications, protocols and standards for the tightly integrated educational digital library services offered by the SMETE Open Federation.
- Represent the needs of the higher education and K-12 partners to the IEEE Learning Technology Standards Committee and IMS Global Learning Consortium.

1998-2004      *Project Director, NEEDS*

1995-1998      *Project Manager, NEEDS*

Responsibilities:

- Develop and expand NEEDS—A Digital Library for Engineering Education at [www.needs.org](http://www.needs.org) by locating exceptional courseware.
- Coordinate, administer and raise industry support for the *Premier Award for Excellence in Engineering Education Courseware*, an annual national competition in its seventh year to recognize high-quality, non-commercial courseware designed to enhance engineering education.
- Author, manage and administer grants and budgets for NEEDS.
- Supervise the team developing NEEDS.

2001-2004      *Consultant, University of California Teaching, Learning and technology Center*

Responsibilities:

- Consult on the architecture, system design and services offered by the University of California Teaching, Learning and technology Center (TLtC) Webzine and Online Forum ([www.ucop.edu/tltc](http://www.ucop.edu/tltc)).
- Worked closely with Julius Zelmanowitz, Vice Provost for Academic Initiatives and Julie Gordon, Associate Director of the Center, at the University of California Office of the President to initiate and support the Center.
- Co-supervised the programmer developing the TLtC Webzine and Online Forum.

1995-2004      *Director, Berkeley Instructional Technology Studio*

Responsibilities:

- Consult with faculty, students and staff developing technology to enhance learning ([bits.me.berkeley.edu](http://bits.me.berkeley.edu)).
- Manage a digital media teaching laboratory in Etcheverry Hall.

- Form successful partnerships across campus to share expertise (including Art Practice, Creative Writing and Music).

1994-1999

*Instructor, Department of Mechanical Engineering*

Courses taught:

- Mechanical Engineering 39C–Multimedia Case Studies of Engineering Design on the World Wide Web
- Mechanical Engineering 139–Project Management of Multimedia Case Studies of Engineering Design.

**2002-2004**

**California State University Office of the Chancellor**

2002-2004

*Director of Alliances, MERLOT*

Responsibilities:

- Develop partnerships and memoranda of understanding with professional societies and international educational organizations to extend the reach of MERLOT. (See [www.merlot.org](http://www.merlot.org).)
- Author, manage and administer grants and budgets for MERLOT.
- Design and develop websites and tools to communicate MERLOT activities to various constituencies (educators, institutional partners, etc.).
- Principal Investigator on *The NSDL Collaboration Finder: Connecting Projects for Effective and Efficient NSDL Development*, NSF Grant.

## CONSULTING

2008

*Consultant, MIT*

Services:

- Wrote pre-proposal to develop an international network for content, context and curriculum around open educational resources for MIT's Office of Educational Innovation and Technology.

2004-present

*Consultant, Virginia Tech*

Services:

- Project management and CD-ROM production for *Premier Award for Excellence in Engineering Education Courseware*

2003-2005

*Consultant, Eduworks, Inc.*

Services:

- Developed and presented workshop materials for “Reusable Learning” project, NSF NSDL Grant ([www.reusablelearning.org](http://www.reusablelearning.org)).
- Webmaster for Reusable Learning project.

2005

*Consultant, AccessExcellence*

Services:

- Metadata application profile development.

2001

*Consultant, American Association for the Advancement of Science*

Services:

- Community building for BiosciEdNet, a digital library for bioscience education ([www.benproject.org](http://www.benproject.org)).
- Metadata application profile development.

## GRANTS

\$1,332,171	Total Funding Received as Principal Investigator
\$4,907,286	Total Funding Received as Principal Investigator and Senior Personnel as Lead Author
\$4,924,991	Additional Funding Received as Co-Principal Investigator
\$9,832,277	Total Funding as Principal Investigator and Senior Personnel as Lead Author, or Co-Principal Investigator

2007	<i>Where Have We Come From and Where are We Going? Learning the Lessons and Disseminating Exemplary Practices from the Projects of the NSDL.</i> Prime: Utah State University. Principal Investigator (and Lead Author). \$89,946. NSF DUE-0737821.
2007	<i>Utah OpenCourseWare Alliance.</i> Prime: Utah State University. Principal Investigator. \$200,000. Utah Legislative Appropriation.
2006	<i>Tool Stewardship for the Field of Open Educational Resources.</i> Prime: Utah State University. Co-Principal Investigator. \$1,800,000. William and Flora Hewlett Foundation.
2006	<i>A Set of Tools for Finding, Reusing, and Iteratively Improving Open Content.</i> Prime Utah State University. Co-Principal Investigator. \$410,000. Andrew W. Mellon Foundation.
2006	<i>Catalyzing the Development and Innovative Use of Open Educational Resources.</i> Prime: Utah State University. Co-Principal Investigator. \$370,000. William and Flora Hewlett Foundation.
2005	<i>Stimulating the Development and Effective Use of Open Educational Resources.</i> Prime: Utah State University. Co-Principal Investigator. \$1,500,000. William and Flora Hewlett Foundation.
2005	<i>Services to Link OpenCourseWare Repositories and the NSDL.</i> Prime: Utah State University. Principal Investigator (and Lead Author). \$690,000. NSF DUE-0532895.
2004	<i>Collaborative Proposal: Personal Collections: Enhancing the Utility of the NSDL.</i> Prime: Eduworks, Inc. Co-Principal Investigator. \$415,080. NSF DUE-0435084.
2003	<i>Fostering Reuse and Interoperability for the NSDL.</i> Prime: Eduworks, Inc. Co-Principal Investigator (also formerly Co-Principal Investigator via California State University Office of the Chancellor of \$30,000 Sub-Contract). \$429,911. NSF DUE-0333590.
2003	<i>CAUSEweb: A Digital Library of Undergraduate Statistics Education.</i> Prime: Ohio State University. Formerly Co-Principal Investigator on Sub-Contract to California State University Office of the Chancellor. \$100,000 (Sub-Contract). NSF DUE-0333672.
2002	<i>The NSDL Collaboration Finder: Connecting Projects for Effective and Efficient NSDL Development.</i> Prime: California State University Office of the Chancellor. Principal Investigator (and Lead Author). \$352,224. NSF DUE-0226277.
2002	<i>Scaling the Peer Review Process for National STEM Education Digital Library Collections.</i> Prime: California State University Office of the Chancellor. Senior Personnel (and Lead Author) on Sub-Contract to UC Berkeley. \$52,000 (Sub-Contract). NSF DUE-0226269.
2001	<i>Collaborative Project: Enhancing Interoperability of NSDL Collections and Services.</i> Prime: University of California, Berkeley. Senior Personnel (and Lead Author). \$1,000,000. NSF DUE-0127580.
2001	<i>Developing a Vision Support Planning Tool From Vision to Reality: NSDL PI Meeting.</i> Supplement to <i>Online Tutorial for Peer Reviewers: Scaling the Peer review of Digital Libraries.</i> Prime: California State University Office of the Chancellor. Senior Personnel. \$76,499 (Sub-Contract). NSF DUE-0085913.
2000	<i>Developing a Core Integration System for a National Science, Mathematics, Engineering, and Technology Education Digital Library at WWW.SMETE.ORG.</i> Prime: University of California, Berkeley. Senior Personnel (and Lead Author). \$846,616. NSF DUE-0085878.

- 1999 *Developing a Prototype National Digital Library for Science, Mathematics Engineering and Technology Education*. Prime: University of California, Berkeley. Senior Personnel (and Lead Author). \$400,000. NSF IIS-9980116.
- 1998 *NSF Action Agenda: Expanding the National Engineering Education Delivery System as the Foundation for an On-Line Engineering Education Community*. Prime: University of California, Berkeley. Senior Personnel (and Lead Author). \$800,000. NSF EEC-9872570.
- 1998 *Using the National Engineering Education Delivery System as the Foundation for Building a Test-Bed Digital Library for Science, Mathematics, Engineering and Technology Education*. Senior Personnel (and Lead Author). \$200,000. NSF IIS-9847106.
- 1997 *Expanding the National Engineering Education Delivery System and Quality Review of Courseware Beyond the Synthesis Coalition*. Supplement to Institutionalization, Evaluation, and Dissemination of Educational Innovations Developed through the Synthesis Coalition. Senior Personnel (and Lead Author). \$100,000 supplement to NSF EEC-9625456.

## STANDARDS ACTIVITIES

- 2000-present Institute of Electrical and Electronics Engineers, Learning Technologies Standards Committee
- Treasurer (2004-2008) and Webmaster (2007-2008)
  - Committee Member of 1484.12 Learning Object Metadata. Contributed to the development of 1484.12.1-2002 IEEE Standard for Learning Object Metadata. Contributing to the development of 1484.12.1-3 Draft Standard for—eXtensible Markup Language (XML) Schema Binding for Learning Object Metadata Data Model.
- 1997-2004 IMS Global Learning Consortium. Contributed to the development of the IMS Learning Object Metadata specification.

## PROFESSIONAL ACTIVITIES AND AFFILIATIONS

- American Society of Mechanical Engineers International (1989-present), Lifetime Associate Member
  - San Francisco Professional Section
    - Chair 1997-1999
    - Treasurer 1999-2005 and 1996-1997
    - College Relations Chair 2001-2005 and 1993-2000
    - Honors & Awards Chair 2000-2005
    - Webmaster 1998-2005
- American Society for Engineering Education (1993-present)
- Institute for Electronics and Electrical Engineers (IEEE) (1999-present)
- Association for the Advancement of Computers in Education (1999-2001)
- Pi Tau Sigma (1992-present)
- Engineering Alumni Society, University of California, Berkeley (1993-present)
- Association of Computing Machinery (ACM) Digital Libraries Conference 1999 Networking Chair
- IEEE/ACM Joint Conference on Digital Libraries 2001 and 2002 Organizing Committee
- General Chair, Open Education Conferences, Center for Open and Sustainable Learning, Utah State University, 2005-present.

## TEACHING HISTORY

- 2007-2008      *Adjunct Instructor, Instructional Technology Department, Utah State University*
- Instructor for INST 7820 Practicum in Instructional Technology required of Ph.D. students in the department.
- 2006-2008      *Guest Lecturer, Instructional Technology Department, Utah State University*
- Guest lectured on budgeting and proposal preparation for INST 6760 Grantwriting.
- 1999-2000      *Course Consultant/Course Chief Technology Officer, Haas School of Business, University of California, Berkeley*
- Consultant/Chief Technology Officer, for Evening MBA course in New Product Development.
- 1994-1999      *Instructor, Department of Mechanical Engineering, University of California, Berkeley*
- Courses taught: Mechanical Engineering 39C–Multimedia Case Studies of Engineering Design on the World Wide Web and Mechanical Engineering 139–Project Management of Multimedia Case Studies of Engineering Design.
- 1993-1995      *Graduate Research Assistant, Department of Mechanical Engineering, University of California, Berkeley*
- Developed and evaluated the Vibrating Beam Experiment Instructional Support Courseware. The courseware supported one of the four experiments required of every senior mechanical engineering student in ME107A, a semester-long course.

## EDUCATIONAL COURSEWARE

- 1997-present    *Premier Award for Excellence In Engineering Education* CDs (CD and web production, see [www.needs.org/premier/](http://www.needs.org/premier/) or [www.engineeringpathway.com/premier/](http://www.engineeringpathway.com/premier/))
- 1997            Multimedia Case Studies of Engineering Design: MMCSWeb and CD (CD and web production, see [bits.me.berkeley.edu/mmcs/](http://bits.me.berkeley.edu/mmcs/))
- 1997            Virtual Disk Drive Design Studio (CD production and design consultant, see [bits.me.berkeley.edu/mmcs/disk/](http://bits.me.berkeley.edu/mmcs/disk/))
- 1996            Graphics Interactive (Design consultant and voice overs)
- 1995            Vibrating Beam Experiment Instructional Support Courseware (Design and development, see [bits.me.berkeley.edu/beam/](http://bits.me.berkeley.edu/beam/))

## UNIVERSITY SERVICE

- 2007            Research Focus Group, Utah State University
- 2002            Learning Management System Subcommittee to the Educational Technology Committee of the E-Berkeley Initiative at University of California, Berkeley
- 1996            Staff Panel Presentation to the Chancellor Search Committee at University of California, Berkeley
- 1995-2001      Instructional Technology Program Courseware Developer Users Group at University of California, Berkeley

1994-1995	Instructional Technology Program Graduate Student Council at University of California, Berkeley
1994-1995	College of Engineering Commencement Committee at University of California, Berkeley
1992-1993	Department of Mechanical Engineering Undergraduate Study Committee at University of California, Berkeley
1992-1993	College of Engineering Undergraduate Study Committee at University of California, Berkeley

## HONORS AND AWARDS

2004 & 2001-2002	American Society of Mechanical Engineers Region IX, Webmaster Award
1999	American Society of Mechanical Engineers Old Guard Young Engineer of the Year, Runner-Up
1999	American Society of Mechanical Engineers Region IX, Young Engineer of the Year
1998	University of California, Berkeley Distinguished Service Award
1993	Charles Mills Gayley Fellowship, University of California, Berkeley
1992-1993	San Francisco Section, American Society of Mechanical Engineers International Farbar Award
1992	Fellow in the Order of the Golden Bear

## REFERENCES

References available upon request.

## PUBLICATIONS AND PRESENTATIONS

1. Agogino, A. M., Dong, A., McMartin F., & Muramatsu, B. (2001). The development of a national science, mathematics, engineering and technology education digital library. *Proceedings of the 12<sup>th</sup> International Conference on New Information Technology, Beijing, China.*
2. Agogino, A.M., McMartin, F., & Muramatsu, B. (1999, November). *SMETE information portal: A digital library for science, mathematics, engineering and technology education.* Presented at NSF DLI-2 All Projects Meeting, Cornell University, Ithaca, NY.
3. Agogino, A. M. & Muramatsu, B. (1998). The National Engineering Education Delivery System (NEEDS): A multimedia digital library of courseware. *International Journal of Engineering Education, 13*(5).
4. Agogino, A.M. and Muramatsu, B. (1996). *The Synthesis Coalition: The National Engineering Education Delivery System (NEEDS): A Multimedia Digital Library of Courseware.* American Society of Engineering Education International Conference, Washington, D.C., June 22-23, 1996.
5. Agogino, A.M. and Muramatsu, B. (1998, July). *Information Technologies Enabling New Modes of Learning.* 5th Annual ABCM Undergraduate Faculty Enhancement Workshop, Berkeley, CA, July 14, 1998.
6. Agogino, A.M. & Muramatsu, B. (1997). *Music and Mechanics: Instructional Technology on Display.* Invited Presentation for the Alumni Associations of the University of California, Sacramento, CA, April 15, 1997.
7. Agogino, A.M., Muramatsu, B., Eibeck, P.A., & Stern, J. (1997). *Effective Processes to Give Engineering Educators Easy Access To Quality Reviewed Electronic Courseware.* National Science Foundation Engineering Education Innovators' Conference, Washington, D.C., April 7-8, 1997.
8. Agogino, A.M. & Muramatsu, B. (1997, March). *Synthesis Coalition: Multimedia and the Internet Enabling New Modes of Learning.* Invited Presentation at the All University Conference on Teaching and Learning, University of California at Los Angeles, Los Angeles, CA, March 25-26, 1997.

9. Agogino, A.M. & Muramatsu, B. (1997, January). *A Multimedia Digital Library of Courseware*. Invited Presentation at the 1997 Berkeley Multimedia Research Center Retreat: New Media Teaching and Learning Techniques, Berkeley, California, January 15-16, 1997.
10. Agogino, A.M. & Muramatsu, B. (1996, June). *The Synthesis Coalition: The National Engineering Education Delivery System (NEEDS): A Multimedia Digital Library of Courseware*. Proceedings of the ASEE International Conference, Washington, D.C., June 21, 1996.
11. Agogino, A.M. and Muramatsu, B. (1996, January). *NEEDS—A Multimedia Library of Engineering Courseware*. Berkeley Multimedia Research Center Retreat, Berkeley, CA, January 11-12, 1996.
12. Agogino, A. M., Muramatsu, B., Eibeck, P.A., Ramirez, M.R., & Oladipupo, B. (1995). Sharing Courseware Resources Through the NEEDS (National Engineering Education Delivery System) Database. *Proceedings of the IEEE/ASEE Frontiers in Engineering Education*, Atlanta, GA, November 1-4, 1995.
13. Agogino, A.M. & Muramatsu, B. (1995b, October). *Multimedia Case Studies of Engineering Design*. Invited Presentation for the Board of Regents of the University of California, San Francisco, CA, October 1995.
14. Agogino, A.M. & Muramatsu, B. (1995a, October). *National Engineering Education Delivery System*. National Technological University (NTU) Engineering Faculty Forum Satellite Broadcast, October 10, 1995.
15. Agogino, A.M. & Muramatsu, B. (1995, August). *Mechatronics and Microelectronic Mechanical Systems*. United States House of Representatives, Committee on Science Visit to the University of California at Berkeley, Berkeley, CA, August 9, 1995.
16. Caswell, T., Muramatsu, B., and Henson, S. (June 2007). *OpenCourseWare: It's not just MIT anymore*. Poster presented at the New Media Consortium Summer Conference, Indianapolis, IN.
17. Dong, A., Koning-Bastiaan, M. & Muramatsu, B. (2002). *Implementing Federated Search Across Collections*. 2002 MERLOT International Conference, Atlanta, GA.
18. Duffin, J. & Muramatsu, B. (2008). *OER Recommender: Linking NSDL Pathways and Open-CourseWare Repositories*. 2008 Joint Conference on Digital Libraries, Pittsburgh, PA.
19. Duffin, J., Muramatsu, B. & Henson Johnson, S. L. (2007). *OER Recommender: A recommendation system for open educational resources and the National Science Digital Library*. White paper funded by the Andrew W. Mellon Foundation for the Folksemantic.org project. (Updated March 7, 2008).
20. Eibeck, P. A. and Muramatsu, B. (1998). *Premier Courseware User Group Session Seminar* at the 1998 Frontiers in Education Conference, Tempe, AZ, November 5-7, 1998.
21. Eibeck, P.A., Muramatsu, B., Ramirez, M.R. (1996, November). *The Importance of Quality in Engineering Courseware Development*. *Proceedings of the IEEE/ASEE Frontiers in Engineering Education*, Salt Lake City, UT, November 6-9, 1996.
22. Eibeck, P.A., Muramatsu, B., & Ramirez, M.R. (1996, September). *Evaluation Criteria for Engineering Instructional Courseware*. National Technological University (NTU) Engineering Faculty Forum Satellite Broadcast, September 8, 1996.
23. Hanley, G., McMartin, F., & Muramatsu, B. (2003). *MERLOT: Multimedia Educational Resource for Learning and Online Teaching*. Ed-Media 2003: World Conference on Educational Multimedia, Hypermedia and Telecommunications, Honolulu, HI.
24. Henson, S., Ball, J., Wiley, D. and Muramatsu, B. (September 2007). *Tag, Annotate, Rate and Share: Activities of Daily Living on the Web*. European Conference on Technology Enhanced Learning 2007, Crete, Greece.
25. Henson, S., Muramatsu, B. and Caswell, T. (2007). *Web 2.0 for Teaching and Learning...Folksemantic Tool Set*. New Media Consortium Summer Conference, Indianapolis, IN.
26. Henson, S.L. & Muramatsu B. (October, 2005). *Starting an OpenCourseWare using eduCommons*. Technical showcase at 2005 E-Learn World Conference, Vancouver, BC.
27. Henson, S.L. & Muramatsu, B. (June, 2005). *Is there an opencourseware project in your future?* New Media Consortium Summer Conference, Honolulu, HI.

28. McMartin, F. & Muramatsu, B. (June 2007). Use versus Access: Design and Use in Educational Digital Libraries. *Proceedings of the 7th ACM/IEEE-CS Joint Conference on Digital Libraries*, Vancouver, BC.
29. McMartin, F. & Muramatsu, B. (2001). Selecting and Adapting Learning Technologies to Improve Engineering Education. *Proceedings of the 2001 International Conference on Engineering Education, Oslo, Norway*.
30. McMartin, F., Bayard, J., Muramatsu, B., & Tront, J. (2001). *Evaluating, Selecting, and Using Computer Enhanced Learning Technologies and Courseware in Engineering Education*. Workshop at Frontiers in Education Conference, Reno, NV.
31. McMartin, F., & Muramatsu, B. (2001, June). What works and the challenges ahead in developing quality digital learning resources: A retrospective view of the Premier Award for Excellence in Engineering Education. *Proceedings of the 2001 Conference of the American Society for Engineering Education, June 24-27, 2001, Albuquerque, New Mexico*.
32. McMartin, F., Bayard, J., Muramatsu, B., & Tront, J. (2000). *Evaluating, Selecting, and Using Computer Enhanced Learning Technologies and Courseware in Engineering Education*. Workshop at Frontiers in Education Conference, Kansas City, MO.
33. McMartin, F., Muramatsu, B., & Agogino, A. (2000). Criteria for Selecting Instructional Software in Engineering Education. *Proceedings of the 2000 American Society for Engineering Education Annual Conference: June 18-21, 2000, St. Louis, MO, Session 3430: June 21, 2000*.
34. Muramatsu, B., Ball, J., Duffin, J., Wiley, D., Gray, J., Godwin, A., Reedstrom, R., Cooper, C. & Whipkey, C. (June, 2008). Open Educational Resources Interoperability Sprint Outcomes: Linking OER Providers. Paper presented at OpeniWorld: Europe 2008, Lyon, France.
35. Muramatsu, B. (March, 2007). Services to Link OpenCourseWare Repositories and the NSDL. Presentation at the Pedagogic Services Partners Meeting, Carleton, MN.
36. Muramatsu, B. & Ball, J. (January, 2007). Services to Link OpenCourseWare Repositories and the NSDL. Presentation at the Registries Experiment Partners Meeting, Seattle, WA.
37. Muramatsu, B. (2006). OpenCourseWare and Open Content: Lessons for NSDL. Presentation in Panel Session "Open Content and the NSDL". NSDL Annual Meeting 2006, Washington, DC.
38. Muramatsu, B. (2006). Linking OpenCourseWare Repositories and the NSDL. Poster at NSDL Annual Meeting 2005, Denver, CO.
39. Muramatsu, B. (2003, November). *NEEDS, SMETE.ORG and Educational Digital Libraries*. Invited Presentation at the American Society for Information Science and Technology. Invited Presentation at the Digital Archives for Science and Engineering Resources Summit, MIT, Cambridge, MA, November 21-23, 2003.
40. Muramatsu, B. (2003, October). *The SMETE Digital Library at www.smete.org*. Presentation at the eLearning Forum's eLearning Research & Programs at UC Berkeley, Berkeley, CA, October 23, 2003.
41. Muramatsu, B. (2002, November). *Extending Scholarship to Including Teaching in a Digital World*. Invited presentation at the SUNY Teaching, Learning, and Technology Meeting, Saratoga, NY, November 30, 2002.
42. Muramatsu, B., Tront, J.G., & Bayard, J.P. (2002, September). *Selecting E-Learning Materials for Adoption and Adaptation in STEM*. Workshop at the 2002 MERLOT International Conference, Atlanta, GA.
43. Muramatsu, B. (moderator), Akli, L., Mason, B., Nair, S., & Ridgeway, J. (2002, September). *Educational Digital Libraries for Science, Technology, Engineering and Mathematics*. Panel at the 2002 MERLOT International Conference, Atlanta, GA.
44. Muramatsu, B. & Tront, J.G. (2002, August). *MERLOT and NEEDS: Educational Digital Libraries for Engineering Education*. Presentation at the United Engineering Foundation Conference on E-Technologies in Engineering Education: Learning Outcomes Providing Future Possibilities, Davos, Switzerland.
45. Muramatsu, B. (2002, July). *NEEDS, SMETE, MERLOT and the National STEM Education Digital Library Program*. Presentation at the Council of Engineering and Scientific Society Executives, San Jose, CA, July 25, 2002.

46. Muramatsu, B. and A. Dong, (2002, July). The SMETE Open Federation: Interoperability of Educational Digital Libraries. *Proceedings of the 2002 ACM/IEEE Joint Conference on Digital Libraries, Portland, OR, July 14-18, 2002.*
47. Muramatsu, B. & Hanley, G.L. (2002, February). *Digital Libraries: A Vehicle For Transforming Education in the Sciences, Mathematics, Engineering And Technology?* Presentation at TechEd 2002 Conference, Long Beach, CA.
48. Muramatsu, B. (2002d, January). *Collaborative Models for the Creation of Online Teaching Material.* Invited Presentation at the Third Richard A. Harvill Conference on Higher Education: Developing a Sense of Place for Distance Education, Tucson, AZ.
49. Muramatsu, B. (2002c, January). *Educational Digital Libraries: The SMETE Open Federation.* Invited Presentation at the Third Richard A. Harvill Conference on Higher Education: Developing a Sense of Place for Distance Education, Tucson, AZ.
50. Muramatsu, B. (2002b, January). *Premier Award for Excellence in Engineering Education Courseware For NEEDS—A Digital Library for Engineering Education.* Invited Presentation at the Third Richard A. Harvill Conference on Higher Education: Developing a Sense of Place for Distance Education, Tucson, AZ.
51. Muramatsu, B. (2002a, January). *Creating Online Faculty Collaboration to Develop Engineering Education Computer Learning Materials.* Invited Presentation at the Third Richard A. Harvill Conference on Higher Education: Developing a Sense of Place for Distance Education, Tucson, AZ.
52. Muramatsu, B. (2001, August). *Selecting and Adapting Digital Learning Resources for Science, Mathematics, Engineering and Technology Education.* Invited Presentation at Virginia Tech.
53. Muramatsu, B. (moderator), Lightbourne, J., Manduca, C., Mardis, M., & Wiley, D. (2001, June). The National SMETE Digital Library. Panel at the *ACM/IEEE Joint Conference on Digital Libraries, Roanoke, VA, June 25-28, 2001.*
54. Muramatsu, B. (2001, April). *Building the SMETE.ORG Alliance.* Invited Presentation at the Strengthening the Public Information Infrastructure for Science Workshop.
55. Muramatsu, B. (2001, April). *Developing a National SMETE Digital Library At smete.org.* Invited Presentation at the American Institute of Physics, Maryland.
56. Muramatsu, B., McMartin, F., & Agogino, A. M. (2000, October). The development of a national science, mathematics, engineering and technology education digital library: Lessons learned from NEEDS. *Proceedings of the 2000 Frontiers in Education Conference, October 2000, Kansas City, MO.*
57. Muramatsu, B. (2000, August). The development of a national science, mathematics, engineering and technology education digital library: Lessons learned from NEEDS. *Proceedings of the 2000 International Conference for Engineering Education, August 13-17, 2000, Taipei, Taiwan.*
58. Muramatsu, B. and McMartin, F. (2000, November). *SMETE.ORG Training and Information Session.* Workshop at the Project Kaleidoscope Faculty 21 Annual Meeting, Tucson, AZ, November 29, 2000.
59. Muramatsu, B. and McMartin, F. (2000a and 2000b, July). *A National SMETE Digital Library,* Presentations at the Project Kaleidoscope Summer Institute, Keystone, CO, July 19 and 26, 2000.
60. Muramatsu, B., (2000, June). Development of the National Digital Library for Science, Mathematics, Engineering and Technology Education: Lessons Learned from NEEDS. *Proceedings of the 2000 American Society for Engineering Education Annual Conference: June 18-21, 2000, St. Louis, MO.*
61. Muramatsu, B. (2000, June). *Learning technology standards.* Tutorial at Ed-Media 2000, Montreal, Canada.
62. Muramatsu, B. (2000, February). *A digital learning space for science, mathematics, engineering, and technology education.* Invited Speaker at the Mathematics/Science Education and Technology 2000 (M/SET), San Diego, CA.
63. Muramatsu, B., Agogino, A.M., Klotz, E., McMartin, F., Robson, R., & Simutis, L. (2000, January). *A national digital library for science, mathematics, engineering, and technology education.* Presentation at the American Mathematics Society/American Mathematics Association Joint Mathematics Meeting, Washington, DC.

64. Muramatsu, B., McMartin, F. & Agogino, A.M. (Presented by Kurt Gramoll). (1999, November). *NEEDS—The National Engineering Education Delivery System*. Workshop on Advanced Technologies for Engineering Education and Consortium Planning: NASA Langley Research Center, Hampton, VA, November 3, 1999.
65. Muramatsu, B., McMartin, F., & Agogino, A.M. (1999, October). *Developing a digital national library for science, mathematics, engineering and technology education: Building upon NEEDS—The National Engineering Education Delivery System*. Poster Session at Webnet: World Conference on WWW and the Internet, Honolulu, HI.
66. Muramatsu, B. (1999, October). *SMETE information portal: A digital library for science, engineering and technology education*. Webnet: World Conference on WWW and the Internet, Honolulu, HI, Preconference Mini Course: Using Metadata to Facilitate Educational Resource Discovery and Reuse.
67. Muramatsu, B. and Agogino, A. (1999). NEEDS — The National Engineering Education Delivery System: A Digital Library for Engineering Education. *D-Lib Magazine*. April 1999, Volume 5, Issue 4, ISSN 1082-9873.
68. Muramatsu, B. (1999). *NEEDS—The National Engineering Education Delivery System*. SUCCEED Coalition-Effective Teaching with Technology Workshop: Clemson, SC, February 19, 1999.
69. Muramatsu, B. (1998, June). *Premier Courseware User Group Panel Session*. 1998 American Society for Engineering Education Annual Conference: June 28-July 1, 1998, Seattle, WA, June 30, 1998.
70. Muramatsu, B. (1998). *synthesis@berkeley*. Invited Presentation to Mechanical Engineering 92-Introduction to Mechanical Engineering - Prof. David Bogy, Berkeley, CA, March 30, 1998.
71. Muramatsu, B. (1998, February). *NEEDS—The National Engineering Education Delivery System. Proceedings of the 1998 Workshop on Advanced Technology for Engineering Education, NASA: Hampton, VA, February 24-25, 1998*.
72. Muramatsu, B. (1997, October). *Synthesis and the National Engineering Education Delivery System: Instructional Technology is Changing the Way we Teach and Learn* Invited Lecture to Engineering 24 - History of Technology - Prof. James Casey, Berkeley, CA, October 21, 1997.
73. Muramatsu, B. (1997, August). *The National Engineering Education Delivery System (NEEDS) Supporting the Transformation of Engineering Education*. Proceedings of the 1997 International Conference on Engineering Education, August 15-17, 1997.
74. Muramatsu, B. (1997, June). *NEEDS—The National Engineering Education Delivery System: A Database of Engineering Education Courseware and Multilevel Peer Review System*. Invited Presentation to the Beta Coalition, Binghamton, NY, June 6, 1997.
75. Muramatsu, B. (1997, May). *The Virtual Disk Drive Design Studio*. Invited Presentation for Quantum, Milpitas, CA, May 2, 1997.
76. Muramatsu, B. & Stern, J. (1997b, March). *Quality Review of Courseware and the NEEDS Database*. Invited Presentation to Library and Information Systems 2xx - Prof. Howard Besser, Berkeley, CA, March 21, 1997.
77. Muramatsu, B. & Stern, J. (1997a, March). *Quality Review of Courseware and the NEEDS Database*. Invited Presentation to Engineering, Math, Science and Technology 291B - Prof. Marcia Linn, Berkeley, CA, March 18, 1997.
78. Muramatsu, B. (1996, March). *Sharing Quality Courseware Through NEEDS—The National Engineering Education Delivery System*. Presentation at University of California at Berkeley, College of Engineering, Industrial Liaison Program, Berkeley, CA March 14, 1996.
79. Muramatsu, B. (1996, February). *Sharing Quality Courseware Through NEEDS—The National Engineering Education Delivery System*. SUCCEED Coalition Third Annual Conference, Blacksburg, VA, February 29-March 2, 1996.
80. Muramatsu, B. (1995). *NEEDS—The National Engineering Education Delivery System*. Invited Lecture in Interdisciplinary Studies 113 - Prof. Mary Kay Duggan, Berkeley, CA, October 18, 1995.

81. Muramatsu, B. (1995, September). *Developing and Distributing Multimedia Courseware: Personal Experiences*. American Society of Mechanical Engineering Design Theory and Methodology Conference, Boston, MA, September 18, 1995.
82. Muramatsu, B. (1994). *Vibrating Beam Experiment*. American Society of Engineering Education, Pacific Southwest Section, September 1994.
83. Tront, J., Muramatsu, B. & Agogino, A. (2007). Selecting and Evaluating Digital Learning Materials for Engineering and Pre-Engineering Education. Workshop at the American Society for Engineering Education Annual Meeting 2007, Honolulu, HI.
84. Tront, J., Muramatsu, B. & McMartin, F. (2005). Selecting and Evaluating Digital Learning Materials for Higher Education. Workshop at the NSDL Annual Meeting 2005, Denver, CO.
85. Tront, J. & Muramatsu, B. (2003, November). *Selecting Computer-Enhanced Learning for Materials Education*. Workshop at Materials Research Society Fall Meeting, Boston, MA.
86. Tront, J.G., Muramatsu, B., McMartin, F., & Bayard, J.P., (2003, July). *Selecting, and Using Computer-Enhanced Learning Technologies and Digital Learning Materials in Engineering Education*. Workshop at the 2003 International Conference on Engineering Education, Valencia, Spain.
87. Tront, J.G., Muramatsu, B., & McMartin, F. (2003, July). Evaluating Quality in Computer-Enhanced Learning Materials in Engineering Education. *Proceedings of the 2003 International Conference on Engineering Education, Valencia, Spain*.
88. Tront, J. & Muramatsu, B. (2003b, July). *Evaluating, Selecting, and Using Computer- Enhanced Learning Technologies and Digital Learning Materials in Engineering Education*. Workshop at 2003 International Conference on Engineering Education, Valencia, Spain.
89. Tront, J. & Muramatsu, B. (2003a, July). *Selecting and Evaluating Digital Learning Materials for Higher Education*. Ed-Media 2003: World Conference on Educational Multimedia, Hypermedia and Telecommunications, Honolulu, HI.
90. Tront, J.G., & Muramatsu, B. (2003, April). *Evaluating, Selecting, and Using Computer- Enhanced Learning Technologies and Digital Learning Materials in Engineering Education*. Invited workshop at the Materials Research Society 2003 Annual Meeting, San Francisco, CA.
91. Tront, J.G., Muramatsu, B., McMartin, F., & Bayard, J.P., (2003, July). *Selecting and Evaluation Digital Learning Materials for Engineering Education*. Workshop at Share the Future IV, Tempe, AZ.
92. Tront, J.G. & Muramatsu, B. (2002, October). *Selecting and Using Digital Learning Materials in Engineering Education*. Invited Workshop at Kettering University, Flint, MI.
93. Tront, J. & Muramatsu, B. (2003, March). *Evaluating, Selecting, and Using Computer- Enhanced Learning Technologies and Digital Learning Materials in Engineering Education*. Workshop at Materials Research Society Spring Meeting, San Francisco, CA.
94. Tront, J.G. & Muramatsu, B. (2002, June). A Community for Developing High-Quality Technology-based Courseware. *Proceedings of the 2002 American Society for Engineering Education Annual Conference and Exposition, Montreal, CA*.
95. Tront, J. & Muramatsu, B. (2002). *Adopting and Adapting E-Learning Materials*. Workshop at Share the Future III, Gainesville, FL.