

Eric J. Baumgartner

Address

221 Martin Luther King Jr. Way E
Seattle, WA 98112-4852
Work Phone: 206.568.0145

E-mail: eric@inquirium.net
Web: <http://cilt.berkeley.edu/people/ebaum/>

Education

B. A. in Computer Science

Cornell University, Ithaca, NY. Degree awarded May, 1988.

Ph. D. in Learning Sciences

Northwestern University, Evanston, IL. Degree awarded December, 2000.

Dissertation title: *Science by design: How teachers support scientific inquiry through design projects*. Dissertation committee: Brian Reiser (chair), Louis Gomez, and James Spillane.

Honors and Awards

Spencer Dissertation Year Fellow, 1997-1998. Spencer Foundation, Chicago, IL.

Professional Experience

Project Director, SCALE

Graduate School of Education, University of California, Berkeley, CA.

Responsible for directing NSF-funded ROLE grant investigating the nature of researchers' and teachers' customization of innovative science education curricula. Principal Investigator: Marcia C. Linn. January 2001 to present.

Lead Designer

Inquirium LLC, Chicago, IL.

Lead designer and co-founder of company specializing in educational technology design and development. October 2000 to present.

Consultant

Intel Innovation in Education, Beaverton, OR.

Contributing to Intel's adoption of technology developed at the Center for Innovative Learning Technologies. July 2001 to present.

Postdoctoral Fellow

Center for Innovative Learning Technologies, University of California, Berkeley, CA.

Primary focus: Visualization and Modeling. Postdoctoral advisor: Marcia C. Linn. August 1998 to December 2000.

Graduate Research Assistant

Learning Sciences Program, Northwestern University, Evanston, IL.

Graduate advisor: Brian J. Reiser. June 1994 to August 1997.

Technology Consultant

Masters of Science in Teaching Program, Northwestern University, Evanston, IL.

October 1997 to June 1998.

Research Associate

Interactive Media Laboratory, Dartmouth Medical School, Hanover, NH.
Designed and built interactive videodisc-based educational software for patients facing elective treatment options. January 1990 to August 1993

Senior Programmer

Department of Medical Information Science, Dartmouth Medical School, Hanover, NH.
Designed and built educational software for medical students and undergraduates. June 1988 to December 1989.

Consultant

Digital Medicine, Inc., Hanover, NH.
Co-designer and instructor of four day academic training course in HyperCard. January 1989 to September 1991.

Teaching Experience**Instructor**

Graduate Seminar on Visualization and Modeling in K–14 Education
Graduate School of Education, University of California, Berkeley, CA.
Course taught in partnership with faculty from Berkeley, Michigan, George Mason, and Georgia. Spring 2000.

Instructor

Graduate Seminar on the Center for Innovative Learning Technologies
Graduate School of Education, University of California, Berkeley, CA.
Course taught in partnership with faculty at Berkeley. Fall 1998.

Technology Instructor

Golden Apple Teacher Education Program
Northwestern University, Evanston, IL.
Provided instruction of use of technology for preservice teachers. Summer 1998.

Teaching Assistant

Graduate Seminar on the Design of Learning Environments
Northwestern University, Evanston, IL. Winter 1997

Teacher Workshop Designer/Instructor

Cray Academy/Northwestern University
Co-designed and co-instructed teacher workshops on the use of the Materials World Modules. Summer 1996.

Interactive Media Workshop Instructor

Dartmouth Medical School
Multimedia on Golden Pond: Producing Exciting Interactive Multimedia for Education and Training. Squam Lake, NH. October 26–30, 1992.

Editorial Experience

Reviewer for the annual conference of the American Educational Research Association.

One-time reviewer for the Journal of Research in Science Teaching.

Grant reviewer for the joint National Science Foundation, Department of Education, and National Institute for Health's Interagency Educational Research Initiative (IERI), Summer 2000.

Reviewer of conference submissions and seed grant proposals for the Center for Innovative Learning Technologies, 1999 to 2000.

Association Memberships

National Association for Research in Science Teaching (NARST)

American Education Research Association (AERA)

AERA Special Interest Groups:

- Math, Science, and Technology
- Advanced Technologies for Learning
- Informal Learning Environments Research

Professional Presentations

Pea, R. D., Hsi, S., & Baumgartner, E. (2001). *Using Synergy Partnerships to Design Technology-Enhanced PBL Environments*. Presentation at the Kids Who Know and Do 2001 Conference, San Francisco, CA.

Baumgartner, E., Hsi, S., Brophy, S., & Rose, R. (2000). *Synergy/Teacher Professional Development*. Theme Overview at CILT 2000 Conference. Tyson's Corner, VA: Center for Innovative Learning Technologies.

Linn, M. C., & Baumgartner, E. (2000). *Modeling and Visualization trends and CILT*. Presentation at the workshop to integrate computer-based modeling and scientific visualization into K-12 teacher education programs, Renton, VA.

Baumgartner, E., & Hsi, S. (2000). *Education & HCC: Supporting Learning with Design and Innovative Technologies*. Invited talk at the Human-Centered Computing Retreat. University of California, Berkeley, CA.

Hsi, S., & Baumgartner, E. (2000). *Supporting Flexibly Adaptive Design of Innovative Science Curricula: Investigating Water Quality*. Cognition and Development Colloquium. Graduate School of Education, University of California, Berkeley, CA.

Baumgartner, E. (1999). *Embedded assessments using visualization and modeling tools*. Presentation at the Annual meeting of the American Educational Research Association, Montreal, Canada.

Baumgartner, E., & Reiser, B. J. (1997). *Design as a context for teaching scientific inquiry*. Presentation at the Design Education Workshop, Atlanta, Georgia.

Baumgartner, E., & Reiser, B. J. (1996). *Engaging students in inquiry through design: How teachers enact design in the classroom*. Poster presented at Annual Meeting of the American Educational Research Association, New York.

Papers and Publications

Baumgartner, E., & Hsi, S. (in review). *Synergy, technology, and teacher professional development*. Journal of Science Education and Technology.

Baumgartner, E. (2000). *Science by design: How teachers support scientific inquiry through design projects*. Unpublished doctoral dissertation, Northwestern University, Evanston, IL.

Baumgartner, E., Seethaler, S., Cheng, B., Lo, E., & Slotta, J. (2000). *Online and midstream: The design of flexibly adaptive tools for understanding water quality*. Paper

- presented at the Annual meeting of the American Educational Research Association, New Orleans, LA.
- Baumgartner, E., Cheng, B., Seethaler, S., & Slotta, J. (2000). *Strawberry Creek: A case of iterative curricular design*. Paper presented at the National Association for Research in Science Teaching, New Orleans, LA.
- Linn, M. C., Slotta, J. D., & Baumgartner, E. (2000). *Teaching high school science in the information age: A review of courses and technology for inquiry-based learning*. Santa Monica, CA: Milken Family Foundation.
- Baumgartner, E. (1999). *Designing inquiry: Contextualizing teaching strategies in inquiry-based classrooms*. Paper presented at the Annual meeting of the American Educational Research Association, Montreal, Canada.
- Baumgartner, E., & Reiser, B. J. (1998). *Merging engineering and scientific reasoning: High school students' use of scientific evidence in design projects*. Paper presented at the Annual Meeting of the National Association for Research in Science Teaching, San Diego, California.
- Baumgartner, E., & Reiser, B. J. (1998). *Strategies for supporting student inquiry in design tasks*. Paper presented at the Annual Meeting of the American Educational Research Association, San Diego, California.
- Baumgartner, E., & Reiser, B. J. (1997). *Inquiry through Design: Situating and supporting inquiry through design projects in high school science classrooms*. Paper presented at the Annual Meeting of the National Association for Research in Science Teaching, Oak Brook, Illinois.
- Tabak, I., Sandoval, W. A., Smith, B. K., Agganis, A., Baumgartner, E., & Reiser, B. J. (1995). *Supporting collaborative guided inquiry in a learning environment for biology*. In J. L. Schnase & E. L. Cunnius (Eds.), *Proceedings of CSCL '95: The First International Conference on Computer Support for Collaborative Learning* (pp. 362-366). Erlbaum.
- Henderson, J., Baumgartner, E., Chesnut, S., Driscoll, B., Henderson, A., & Hurd, L. (1992). *Camera informatica: Producing interactive media programs for patients facing difficult choices*. *Camera Obscura*, 29, 233-240.