

July 23, 2019

James D. Slotta, Curriculum Vita

Current Position: *Professor*
President's Chair in Knowledge Technologies
Ontario Institute for Studies in Education
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Education

Postdoctoral Scholar, University of California at Berkeley, Berkeley, California 1996-1998
Ph.D. in Psychology, University of Pittsburgh, Pittsburgh, Pennsylvania 1997
Doctoral Committee: Micki Chi (advisor), Lauren Resnick, Kurt vanLehn, Alan Lesgold
Understanding constraint-based processes: A precursor to conceptual change in physics
M.S. in Psychology, University of Massachusetts, Amherst, Massachusetts 1989
Masters Advisor: David Rosenbaum
Published thesis: Optimal Movement Selection
B.S. in Physics, High honors, Case Institute of Technology, Cleveland, Ohio 1987
Graduate level physics courses through Masters level

Employment History

<i>Professor</i>	OISE, University of Toronto, Canada	2018-present
<i>Professor of Education</i>	Lynch School of Education, Boston College	2016-2018
<i>Associate Dean, Research</i>		
<i>Associate Professor</i>	OISE, University of Toronto, Canada	2005-2016
<i>Adjunct Associate Professor</i>	School of Education, Univ. California, Berkeley	2004-2005
<i>Professional Researcher</i>	School of Education, Univ. California, Berkeley	1998-2004
<i>Postdoctoral Scholar</i>	School of Education, Univ. California, Berkeley	1995-1998
<i>Graduate Instructor</i>	University of Pittsburgh	1993-1995
<i>Graduate Researcher</i>	University of Pittsburg	1990-1995
<i>Human Factors Intern</i>	IBM Corporation, Poughkeepsie, New York	1989-1990
<i>Graduate Researcher,</i>	University of Massachusetts, Amherst,	1987-1989
<i>Physics Research Assistant</i>	Case Institute of Technology, Cleveland, Oh.	1986-1987
<i>Physics Teaching Assistant</i>	Case Institute of Technology, Cleveland, Oh.	1985-1987

Awards

SALTISE Pedagogical Innovation and Lifetime of Contribution Award	2015
- recognizes exceptional achievement in promoting educational innovation	
Top 10 most cited articles, 2007-2001, Journal of Learning and Instruction	2012

- Kollar, Fischer & Slotta, 2007. <i>Internal and external scripts in computer-supported collaborative learning. Learning & Instruction, 17(6), 708-721.</i>	
Best student research paper (<i>senior author and research supervisor</i>).	2011
- Tissenbaum, M., Lui, M., & Slotta, J.D. (2011). <i>Rethinking Education in the Knowledge Society Conference, Monte Verita, Switzerland</i>	
Canada Research Chair in Education and Technology – second award	2011
World Technology Award Winner (category of Education)	2006
Canada Research Chair in Education and Technology	2006
NASA VDC “Most Usable Research Paper” (with Ingo Kollar and Frank Fischer)	2005
Best student paper, CSCL 2005 (<i>senior author and research supervisor</i>)	2005
- Kollar, I., Fischer, F., & Slotta, J. D. (2005). <i>Internal and external collaboration scripts in web-based science learning at schools. In T. Koschmann, D. D. Suthers, & T.-W. Chan (Eds.), Computer Supported Collaborative Learning 2005: The Next 10 Years!</i>	
IBM Faculty Award for eLearning design.	2003
National Association for Interpretation 2002 Media Awards contest.	2002
- First Place (with Andrea Strauss) "Interpretive Program Curriculum"	
Learning Software Design Award, University of Minnesota.	2001
Tim Post Award for outstanding psychology graduate student.	1995
IBM Leadership Award, Poughkeepsie, NY.	1989
Physics Departmental Tutor (high honors), Case Institute of Technology.	1987
Valedictorian of graduating class, Regis Jesuit High School (Denver, CO).	1983

Students and Post-docs chaired or co-chaired

University of Toronto (in progress)

Garrick Burron, MA student	2019 – present
Joel Wiebe, PhD student	2019 – present
Preeti Raman, PhD student	2019 – present
Kathy Zhou, MA student	2018 – present
Elena Boldyreva, PhD student	2018 – present
Maria Serevetas-Paulovich, PhD student	2013 – present

University of Toronto (completed)

Alisa Acosta (PhD, 2018). <i>Scripting and Orchestration of a Knowledge Community and Inquiry Curriculum for Secondary Biology.</i>
Steven Ehrlich (PhD, 2017). Thesis title: <i>Building Learning Community in Post-Secondary Large Lecture Courses: A Blended Approach to Fostering Communities of Learners.</i>
Rebecca Quintana (PhD, 2017). Thesis title: <i>The Role of Visual Representations in a Knowledge Curriculum and Inquiry Curriculum.</i>
Stian Haklev (PhD, 2016). Thesis title: <i>From Seminar to Lecture to MOOC: Scripting and Orchestration at Scale.</i>
Naxin Zhao (PhD, 2015). Thesis title: <i>Understanding the Teacher’s Role in a Knowledge Community and Inquiry Curriculum.</i>
Michelle Lui (PhD, 2015). Thesis title: <i>Designing EvoRoom: An Immersive Simulation Environment for Collective Inquiry in Secondary Science</i>

- Sarah Morrison (PhD, 2014). Thesis title: Engaging Student Singers: Developing Reflection and Collaboration in a Technology-Enhanced Learning Environment.
- Cresencia Fong (PhD, 2014). Thesis title: Supporting Discourse and Classroom Orchestration in a Knowledge Community and Inquiry Approach.
- Mike Tissenbaum (PhD, 2014). Thesis title: Supporting Collective Inquiry: A Technology Framework for Distributed Learning
- Arif Anwar (PhD, 2014). Thesis title: Non-literate and Low-literate Mobile Phone Users: Do they Acquire Literacy?
- Alisa Acosta (MA, 2013). Thesis title: The Role of Epistemic Cognition in Complex Collaborative Inquiry Curricula
- Rebecca Cober (MA, 2012). Thesis title: The Role of Aggregate Representations in Scaffolding Collective Inquiry.
- Hedieh Najafi (PhD, 2012). Thesis title: Transforming Learning in Science Classrooms: A Blended Knowledge Community Approach.
- Gita Wassmer (PhD, 2011). Thesis title: Supporting New School Leaders: The Benefits of Online Peer Communities.
- Vanessa Peters (PhD, 2010). Thesis title: Scaffolding Knowledge Community and Inquiry in Secondary Science.
- Cheryl Madeira (PhD, 2010). Thesis title: How pedagogical content knowledge develops: The impact of teacher reflections and peer exchange.
- Arif Anwar (MA, 2008). Thesis title: Towards a Role Framework for Mobile Devices in Educational Contexts: A Meta-Ethnographic Approach
- Christina Parker (MTE, 2008). Masters Research Project: Who Am I? Children's Conceptualizations of Their Cultural Identity.
- Tracey Wallace (MA, 2008). Thesis title: ICT-Based Knowledge Management and HIV/AIDS in South Africa: The Role of Civil Service Organizations.

Boston College

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|-----------------------------|----------------|
| Miriam Gates, PhD student | 2016 – 2019 |
| Megan McKinley, PhD student | 2016 – 2018 |
| Melita Morales, PhD student | 2017 – present |

University of California, Berkeley (completed)

- Jacqueline Madhok (PhD, 2006). *PhD Thesis*: The longitudinal impact of an eighth grade inquiry science curriculum on students who are at risk for science learning: Interactions between epistemological beliefs and achievement in science.
- Tom Azwell (MA, 2006). *MA Thesis*: Extending research-based innovations to teachers at a distance: Scaffolding mentor and teacher practices in a technology support environment.
- Tim Zimmerman (PhD, 2005). *PhD Thesis*: Promoting Knowledge Integration of Scientific Principles and Environmental Stewardship: Assessing an Issue-based Approach to Teaching Evolution and Marine Conservation.
- Matthew Fishbach (MA, 2005). *MA Thesis*: New technologies and user experiences: Adaptive feedback in game-like learning.
- Carrie-Anna McCoy (MA, 2004). *MA Thesis*: Scripting as a Collaborative Tool in Problem Solving.

Post Doctoral Scholars

- Helen Zhang (2016-2018) Learning communities, technology, active learning in higher education.
Michelle Lui (2016-2018) SHHRC post-doc, tangible and embodied user interface design
Einat Gil (2013 – 2015) Smart Classrooms for Statistics Learning.
Hedieh Najafi (2012 – 2015) Citizen Science and MOOCS
Cheryl Madeira (2011 – 2014) Teacher Communities.
Jeffery Holmes (2003 – 2005) Technology-enhanced learning.
Michele Spitulnik (2001-2004) Teacher professional development

Funded Research

- 2018 – 2023. Principal Investigator, SSHRC Insight grant. 435-2019-0539. Active Learning Communities for K-12 Science Classrooms. [CAD \$316,041].
- 2018 – 2019. Principal Investigator, SSHRC-SIG Departmental grant. Investigating new forms of active learning supports for secondary science. [CAD \$2500]
- 2016 – 2023. co-Principal Investigator, CIHR - Foundation Scheme – 2nd Live Pilot (B. Stevens, PI – Sick Kids Hospital). Effective Knowledge Translation Strategies for Enhancing Impact and Improving Outcomes in Infant Pain. [CAD \$3,823,346].
- 2015 – 2017. Co-Principal Investigator, SSHRC College Community Social Innovation Fund (SSHRC-CCSIF grant #2240107. E. Charles, PI – Dawson College). Leveraging new paradigms and disruptive technologies to successfully orchestrate pedagogical change. [CAD \$440,000].
- 2013 – 2017. Co-Principal Investigator, NSF funded project Cyberlearning grant #1324977. Community knowledge construction in the instrumented classroom. [US \$1,349,844 with a CAD \$564,270 subaward to the University of Toronto].
- 2013 – 2015. Principal Investigator, SSHRC Insight Development research grant #430-2013-000365. Learning through discourse: The impact of digital media on community healthworkers' knowledge and practices. CAD \$74,242.
- 2012 – 2014. Co-principal investigator, NIH-funded project R34MH097563: CHAT: mHealth Innovation for HIV-MNCH Community Health Workers in South Africa. [US \$262k, with CAD \$67k subaward to Univ. of Toronto].
- 2011 – 2014. Principal Investigator, SSHRC standard faculty research grant. 410-2011-0474. Knowledge Community and Inquiry for Elementary Science Classrooms. [CAD \$151,770].
2011. Co-Principal Investigator, Multiple Surfaces for Collaborative Learning (MuSuCo) - STELLAR Theme Team: European Union funded [16,000 Euros for travel to ICLS 2012, Sydney, Australia].
- 2011 – 2015. Co-principal investigator, NSF funded project CISE-1065275: Supporting technologies for the enactment of complex science pedagogical forms [U.S. \$1.8 Million, with U.S. \$431,039 subaward to Univ. of Toronto].
- 2011 – 2014. Principal Investigator, CFI funded Canada Research Chair in Information Technology: Technology Environments for Knowledge Community and Inquiry [\$524,500].
- 2011 – 2012. Principal Investigator, SSHRC and University of Toronto funded Project #192319. Sustaining a Technology Community for the Learning Sciences. Canada-California Strategic Innovation Partnership (CCSIP). [U.S. \$81,635].

- 2010 – 2013. Co-Principal Investigator, NSF-funded project DRL 1031680. Promoting 21st Century Science: Technology-Enhanced Learning Across Formal and Informal Environments. [U.S. \$1.13 Million, with U.S. \$305,894 subaward to Univ. of Toronto].
- 2009 – 2010. Principal Investigator, SSHRC and University of Toronto funded Canada-California Strategic Innovation Partnership (CCSIP) Project #141678. A role for a technology community within a research field. [U.S. \$50,000].
- 2008 – 2012. Principal Investigator, SSHRC grant funded project 410-2008-2125 (CID/NIC 181093). Technology enhanced activities and interactions in the science classroom: pedagogical scripts for knowledge communities. [CAD \$123,000].
- 2008 – 2012. Co-Principal Investigator, European Union FP7-ICT-2007-1 funded project 212814. (T. deJong, PI – University of Twente). Science Created by You. [8.5 Million Euros].
- 2008 – 2013 Co-Principal Investigator, NSF funded project DRL-0733299 Logging Opportunities in Online Programs for Science (LOOPS): Student and Teacher Learning. [US \$2.5 Million, with US \$314,029 subaward to University of Toronto].
- 2007 – 2008 Co-Principal Investigator, University of Toronto Instructional Technology Courseware Development Fund (ITCDF) grant: A Casebook of Effective Information Technology Teaching and Learning Practices. [\$15,000]
- 2006 – 2009 Co-Principal Investigator, NSF funded project EEP 0550169. Developing Ontological Schema Training Methods to Help Students Develop Scientifically Accurate Mental Models of Engineering Concepts. [US \$750,000, with US \$178,211 subaward to University of Toronto].
- 2006 – 2011 Principal Investigator, CFI funded Canada Research Chair in Information Technology: Technology-Enhanced Collaboration and Inquiry for Science [CAD \$332,000]
- 2006 – 2008. Principal Investigator, Connaught Foundation funded project, *A school-based community for curriculum design and research partnership*. [CAD \$10,000]
- 2005 – 2010 Co-Principal Investigator, NSF funded project TPC 0455877 *Mentored and Online Development of Educational Leaders for Science (MODELS)*. [US \$2.4 Million].
- 2004 – 2006 Co-Principal Investigator, *NetColl: Scientific Network for Collaborative Inquiry Learning*. German DFG-funded project, [€19,600] Thorsten Bell, PI.
- 2004 – 2006 Co-Principal Investigator, Department of Forestry Educational Development Award for developing two WISE forestry projects [\$14,000]. Theresa Heyer, PI.
- 2003 – 2008 Co-Principal Investigator, NSF funded project CLT 03-34199 (Centers for Learning and Teaching): *The Educational Accelerator Center: Technology-Enhanced Learning in Science (TELS)* [\$10,000,000].
- 2003 – 2004. Principal Investigator, IBM Faculty Award. *Exploring the Potential of Open Source for E-learning* [\$36,000 for 1 year].
- 2003 – 2006 Co-Principal Investigator: NSF funded project REC 03-11835 (ROLE Quadrant IV) A Partnership Model for Integrating Technology, Curriculum, and Professional Development in Response to New Science Assessments [\$1,734,008].
- 2001 – 2002 Principal Investigator: Palm Educational Partnership Research Hub Award. *The WISE-Palm Research Partnership*. [\$149,500 in technology value].
- 2001 – 2004 Co-Principal Investigator: NSF funded project REC 98-73180 *Accomplishment-Based Renewal for the Web-based Inquiry Science Environment*. [\$1,200,000].

1998 – 2002 Author, Director: NSF funded project REC 98-05420. *Supporting Teachers and Encouraging Lifelong Learning: A Web-Based Inquiry Science Environment (WISE)*. [\$1,187,265]. Marcia C. Linn, PI.

1998 – 2002 Author, Co-director: NSF funded project REC 98-73160. *Science-Controversies: On-line Partnerships in Education (SCOPE)*. [\$1,840,000]. Marcia C. Linn, PI.

Technology Designs

Common Knowledge: Scripting and orchestration support for learning communities 2012 – present

CHAT: Community Healthworker Assistive Technologies 2012 – present

Tablet computer environment to support South African community healthworkers

SAIL Smart Space (S3). A Distributed Technology-Enhanced Learning Environment 2007 – present

ENCORE: Educational Network and Community for Open Resource Exchange 2006 – present

Community for open source development and exchange in the learning sciences

SAIL: The Scalable Architecture for Interactive Learning 2005 – present

An open source framework for interoperable learning technologies.

UC-WISE: University of California Web-based Instruction in Science and Engineering 2001 – 2005

A technology enhanced learning environment for computer science.

WISE: The Web-based Integrated Science Environment 1998 – 2009

Authoring and Run-time support of inquiry science curriculum and assessment.

KIE: The Knowledge Integration Environment 1996 – 1998

The first Web-enabled learning environment for K-12 science.

Software Background: Pascal, C, LISP, EASEL, SmallTalk, HyperTalk, Visual Basic, other
IBM Corporation: Lead programmer in two interdepartmental projects (1989-90)

Publications

Books

Slotta, J. D. & Linn, M. C. (2009). *WISE Science: Inquiry and the Internet in the Science Classroom*. Teachers College Press.

Book Chapters

Traustan-Matu, S., Slotta, J. (in press). Artifact Analysis. *International Handbook of Computer Supported Collaborative Learning*.

Tissenbaum, M., Looi, Chee Kit & Slotta, J.D. (in press). Interactive surfaces: Stationary and on the move. *International Handbook of Computer Supported Collaborative Learning*.

Slotta, J., Quintana, R., & Moher, T. (2018). Collective Inquiry in Communities of Learners. In the *International Handbook of the Learning Sciences*. (F. Fischer, C. Hmelo-Silver, P. Reimann, & S. Goldman, Eds.). Routledge.

Tissenbaum, M., & Slotta, J. D. (2015). Scripting and Orchestration of Learning Across Contexts: A Role for Intelligent Agents and Data Mining. In *Seamless Learning in the Age of Mobile Connectivity* (pp. 223-257). Springer Singapore.

Slotta, J.D. (2014). Tangible and Embodied Interactions for Learning. In Richard Gunstone (Ed.) *Encyclopedia of Science Education*. Springer.

- Slotta, J.D. (2014). Technology for Science Education: Research. In Richard Gunstone (Ed.) *Encyclopedia of Science Education*. Springer.
- Slotta, J.D. & Najafi, H. (2013). Supporting Collaborative Knowledge Construction with Web 2.0 Technologies. In *Emerging Technologies for the Classroom: A Learning Sciences Perspective* (N. Lavigne, Ed.). pp. 93-112. Springer.
- Slotta, J.D. & Najafi, H. (2012). Technology-Enhanced Learning Environments for Science Inquiry. In Norbert H. Seel (Ed.) *Encyclopedia of the Sciences of Learning*. pp.3287-3295. Springer.
- Slotta J D and Najafi H (2010), Knowledge Communities in the Classroom. In: Penelope Peterson, Eva Baker, Barry McGaw, (Editors), *International Encyclopedia of Education*. volume 8, pp. 189-196. Oxford: Elsevier.
- Peters, V. L., & Slotta, J. D. (2010). Scaffolding knowledge communities in the classroom: New opportunities in the Web 2.0 era. In M. J. Jacobson & P. Reimann (Eds.), *Designs for learning environments of the future: International perspectives from the learning sciences* (pp. 205-232). Secaucus, NJ: Springer.
- Slotta, J. D. (2010). Evolving the classrooms of the future: The interplay of pedagogy, technology and community. In K. Mäkitalo-Siegl, F. Kaplan, J. Zottmann & F. Fischer (Eds.). *Classroom of the Future*. Orchestrating collaborative spaces. (215-242). Rotterdam: Sense.
- Krajcik, J., Slotta, J.D., McNeil, K. and Reiser, B. (2008). Designing Learning Environments to Support Students' Integrated Understanding. In Y. Kali, M. C. Linn, & J. E. Roseman (Eds.), *Designing Coherent Science Education*. New York: Teachers College Press.
- Berge, O. and Slotta, J. (2006). "Learning Technology Standards and Inquiry-Based Learning." In: A. Koohang (Ed). *Principles and Practices of the Effective Use of Learning Objects*. Informing Science Press.
- Linn, M.C. and Slotta, J.D. (2006). Enabling participants in online forums to learn from each other. In: A. O'Donnell, J.L. van der Linden, & C.E. Hmelo (Eds.) *Collaborative Learning, Reasoning, and Technology*. 61-97. 2001 Rutgers Invitational Series in Education, Lawrence Erlbaum.
- Clark, D. B., & Slotta, J. D. (2004). The Web-based Inquiry Science Environment (WISE): Research and design. In A. Kovalchick and K. Dawson (Eds.), *Education And Technology: An Encyclopedia*. Vol. 2., 630-637. ABC-CLIO: Denver Colorado.
- Slotta, J.D (2004). The Web-based Inquiry Science Environment (WISE): Scaffolding Knowledge Integration in the Science Classroom. In M.C. Linn, P. Bell and E. Davis (Eds). *Internet Environments for Science Education*. 203-232 . LEA.
- Niedderer, H., Sander, F., Goldberg, F., Otero, V., Jorde, D., Slotta, J., Strømme, A., Fischer, H. E., Hucke, L., Tiberghien, A., & Vince, J. (2003). Research about the use of information technology in science education. In D. Psillos et al (Eds.), *Science Education Research in the Knowledge-Based Society*, 309-321. Dordrecht: Kluwer Academic Publishers.
- Slotta, J. D. & Linn, M. C. (2000). The Knowledge Integration Environment: Helping students use the Internet Effectively. In Jacobson, M. J. & Kozma, R. (Ed.), *Learning the Sciences of the 21st Century*. 193-226. Hilldale, NJ: Lawrence Erlbaum & Associates.

Peer reviewed Journal Articles

- Tissenbaum, M. & Slotta, J.D. (in press). Developing a smart classroom infrastructure to support real-time student collaboration and inquiry – a four-year design study. *Instructional Science*

- Acosta, A. & Slotta, J.D. (2018). CKBiology: An Active Learning Curriculum Design for Secondary Biology. *Frontiers in Science*.
- Ehrlick, S. & Slotta J.D. (2018). A Learning Community Approach for Post-Secondary Large Lecture Courses. *Frontiers in Science*
- Fong, C. & Slotta, J.D. (2018). Supporting communities of learners in the elementary classroom: The common knowledge learning environment. *Instructional Science*, 46(4), 533-561.
- Korsager, M., & Slotta, J. D. (2015). "Climate change is global, not local" – A study of the Development of Students' Ecological and Global Understanding of Climate Change. *International Journal of Environmental and Science Education*, 10(4), 717-736.
- Cober, R., Tan, E., Slotta, J.D., So, H., & Könings, K.D. (2015). Teachers as participatory designers: Two case studies with technology-enhanced learning environments. *Instructional Science*. 43(2) 203-228.
- Korsager, M., Slotta, J. D., & Jorde, D. (2014). Global Climate Exchange: Peer collaboration in a "Global classroom". *Nordic Studies in Science Education*, 1(1), 105-120.
- Lui, M., & Slotta, J. D. (2014). Immersive simulations for smart classrooms: exploring evolutionary concepts in secondary science. *Technology, Pedagogy and Education*, 23(1): 57 – 80.
- Chi, M.T.H., Roscoe, R., Slotta, J., Roy, M., & Chase, M. (2012). Misconceived causal explanations for "emergent" processes. *Cognitive Science*, 36, 1-61.
- Yang, D., Streveler, R. A., Miller, R. L., Slotta, J., Matusovich, H., & Magana, A. (2012). Using computer-based online learning modules to promote conceptual change: Helping students understand difficult concepts in thermal and transport science. *International Journal of Engineering Education*, 28(3), 686-700.
- Tissenbaum, M., Lui, M., & Slotta, J. D. (2012). Co-designing collaborative smart classroom curriculum for secondary school science. *Journal of Universal Computer Science*. 18 (3), 327-352.
- Slotta, J. D. (2011). In Defense of Chi's Ontological Incompatibility Hypothesis. *Journal of the Learning Sciences*, 20: 1, 151-162.
- Slotta, J.D., Schanze, S. & Pinkwart, N. (2010). Guest Editors' Introduction. Special Issue: *International Perspectives On Inquiry And Technology. Research and Practice in Technology Enhanced Learning* Vol. 5, No. 3. 155–160. World Scientific Publishing Company & Asia-Pacific Society for Computers in Education.
- Linn, M.C., Slotta, J.D., Terashima, H., Stone, E. & Madhok, J. (2010). Designing Science Instruction using the Web-based Inquiry Science Environment (WISE). *Asia-Pacific Forum on Science Learning and Teaching*, Volume 11 (2). P. 1–23.
- Slotta, J.D. & Jorde, D. (2010). Toward a Design Framework for International Peer Discussions: Taking Advantage of Disparate Perspectives on Socioscientific Issues. *Research and Practice in Technology Enhanced Learning* Vol. 5, No. 3. 161-184. World Scientific Publishing Company & Asia-Pacific Society for Computers in Education.
- Jong, T., van Joolingen, W.R., Giemza, A., Girault, I., Hoppe, U., Kindermann, J., Kluge, A.W., Lazonder, A.W., Vold, V., Weinberger, A., Weinbrenner, S., Wichmann, A. Anjewierden, A., Bodin, M., Bollen, L. d'Ham, C., Dolonen, J., Engler, J., Geraedts, C., Grosskreutz, H., Hovardas, T., Julien, R., Lechner, J., Ludvigsen, S., Matteman, Y., Meistadt, Ø., Næss, B., Ney, M., Pedaste, M., Perritano, A., Rinket, M., von Schlanbusch, H., Sarapuu, T., Schulz, F., Sikken, J., Slotta, J., Toussaint, J., Verkade, A., Wajeman, C., Wasson, B., Zacharia, Z.C., & van der Zanden, M. (2010). Learning by creating and exchanging objects: the SCY experience. *British Journal of Educational Technology*, 41, 909-921.

- Slotta, J.D. and Aleahmad, T. (2009). WISE technology lessons: Moving from a local proprietary system to a global open source framework. *Research and Practice in Technology Enhanced Learning*. 4 (2) 169–189. World Scientific Publishing Company.
- Peterson, S. S. and Slotta, J. D. (2009). Saying Yes to Online Learning: A First-Time Experience Teaching an Online Graduate Course in Literacy Education. *Literacy Research and Instruction*, 48: 120–136. Routledge.
- Kollar, I., Fischer, F. & Slotta, J. D. (2007). Internal and external scripts in computer-supported collaborative learning. *Learning & Instruction*, 17(6), 708-721.
- Slotta, J. D. & Chi, M. T. H. (2006). The impact of ontology training on conceptual change: Helping students understand the challenging topics in science. *Cognition and Instruction* 24(2). 261-289. Lawrence Erlbaum Associates.
- Linn, M.C., Husic, F., Slotta, J.D., & Tinker, R. (2006). Technology Enhanced Learning in Science (TELS): Research Programs. *Educational Technology*, 46(3), 54-68.
- Cuthbert, A. J., & Slotta, J. D. (2004). Designing a web-based design curriculum for middle school science: the WISE Houses In The Desert project. *International Journal of Science Education*, 26(7), 821-844.
- Kollar, I., Fischer, F., Slotta, J. D. & Meister, D. (2004). Missbildungen bei Fröschen: Parasiten oder chemische Substanzen? Online-Kontroversen in WISE. *Praxis der Naturwissenschaften - Biologie in der Schule*, 53(3), 38-39.
- Meister, D.M., Fischer, F., Kollar, I. & Slotta, J.D. (2004). Lehrer-Communities - Erfahrungen aus der web-basierten WISE-Lernumgebung. *Computer und Unterricht*, 54, 50-53.
- Linn, M. C., Clark, D. B., & Slotta, J. D. (2003). WISE Design for Knowledge Integration. *Science Education*, 87(4), 517-538.
- Slotta, J.D. (2002). Designing the Web-based Inquiry Science Environment. In S. Hooper (Ed). *Educational Technology*. 42(5), 15-20.
- Slotta, J.D. (2002). Partnerships in the Web-based Inquiry Science Environment (WISE). *Cognitive Studies*, 9(3) 351-361.
- Fischer, F. & Slotta, J. D. (2002). Online-Kontroversen in WISE. Wie das Internet genutzt werden kann, um naturwissenschaftliches Denken zugänglich zu machen. *Computer und Unterricht*, 11, 27-29.
- Reiner, M. Slotta, J. D., Chi, M. T. H. & Resnick, L. B. (2000). Naive physics reasoning: A commitment to substance-based conceptions. *Cognition and Instruction*, 18(1), 1-35.
- Linn, M.C. & Slotta, J.D. (2000) WISE Science. *Educational Leadership*, 52, 29-32. Association for Supervision and Curriculum Development. Alexandria, VA.
- Clark, D. B., & Slotta, J. D. (2000). Source credibility, source media, and students' interpretation of information on the Internet. *International Journal of Science Education*, 22 (8), 859-871.
- Linn, M. C., Shear, L., Bell, P., & Slotta, J. D. (1999). Organizing principles for science education partnerships: Case studies of students' learning about 'rats in space' and 'deformed frogs'. *Educational Technology Research and Development*, 47(2), 61-84.
- Slotta, J. D. & Chi, M. T. H., and Joram, E. (1995). Assessing students' misclassifications of physics concepts: An ontological basis for conceptual change. *Cognition and Instruction*. 13, (3), 373-400.
- Chi, M. T. H., Slotta, J. D. & deLeeuw, N. A. (1994). From things to processes: a theory of conceptual change for learning science concepts. Special issue on "Conceptual Change," *Learning and Instruction*, 4, 27-43.

- Chi, M. T. H. & Slotta, J. D. (1993). The ontological coherence of intuitive physics. Commentary on A. diSessa's "Toward an epistemology of physics." *Cognition and Instruction*, 10 (2,3), 249-260.
- Rosenbaum, D. A., Slotta, J. D. & Vaughan, J. & Plamondon, R. (1991). Optimal movement selection. *Psychological Science*, 2(2), 86-91. (Based on second author's master's thesis.)
- Rosenbaum, D. A., Marchak, F., Barnes, H. J., Vaughan, J., Slotta, J. D., & Jorgensen, M. (1990). Constraints for action selection: Overhand versus underhand grips. In M. Jeannerod (Ed.), *Attention and Performance XIII: Motor representation and control*. 321-342. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Rosenbaum, D. A., Barnes, H. J., & Slotta, J. D. (1988). In defense of the advance specification hypothesis for motor control. *Psychological Research*, 50, 58-62.
- Rosenbaum, D. A., Vaughan, J., Jorgensen, M. J., Slotta, J. D., & Barnes, H. J. (1988). One bad turn deserves another: A rule of thumb for hand rotations. *Five College Cognitive Science Paper 88-2*.

Peer-reviewed Proceedings

- Semerjian, A., Duesbery, L., & Slotta, J.D. (2018). The visual test of science identity (VTSI). *The International Conference of the Learning Sciences (ICLS) 2018*. London: International Society of the Learning Sciences.
- Acosta, A., & Slotta, J. (2018). Representations of progress in a learning community curriculum for grade 12 biology. International Society of the Learning Sciences, Inc.[ISLS]..
- Linn, M. C., Eylon, B. S., Kidron, A., Gerard, L., Toutkoushian, E., Ryoo, K. K., ... & Barnes, J. (2018). Knowledge Integration in the Digital Age: Trajectories, Opportunities and Future Directions. In Proceedings of International Conference of the Learning Sciences, ICLS (Vol. 2, No. 2018-Jun, pp. 1259-1266). ISLS.
- Håkklev, S., Sharma, K., Slotta, J. & Dillenbourg, P. (2017). *Contextualizing the co-creation of artefacts within the nested social structure of a collaborative MOOC*. In: Lavoué É., Drachler H., Verbert K., Broisin J., Pérez-Sanagustín M. (eds) Data Driven Approaches in Digital Education. EC-TEL 2017. Lecture Notes in Computer Science, vol 10474. Springer.
- Quintana, R., Moher, T., & Slotta, J. (2017). The Role of Visual Representations Within the Scientific Practice of Explanation. In Smith, B. K., Borge, M., Mercier, E., and Lim, K. Y. (Eds.). (2017). Making a Difference: Prioritizing Equity and Access in CSCL, 12th International Conference on Computer Supported Collaborative Learning (CSCL) 2017, Volume 1. Philadelphia, PA: International Society of the Learning Sciences
- Acosta, A. & Slotta, J.D., (2017). Scripting and Orchestrating Learning Communities: A Role for Learning Analytics. In Smith, B. K., Borge, M., Mercier, E., and Lim, K. Y. (Eds.). (2017). Making a Difference: Prioritizing Equity and Access in CSCL, 12th International Conference on Computer Supported Collaborative Learning (CSCL) 2017, Volume 1. Philadelphia, PA: International Society of the Learning Sciences.
- Håkklev S., Slotta J.D. (2017) A Principled Approach to the Design of Collaborative MOOC Curricula. In: Delgado Kloos C., Jermann P., Pérez-Sanagustín M., Seaton D., White S. (eds) Digital Education: Out to the World and Back to the Campus. EMOCs 2017. Lecture Notes in Computer Science, vol 10254. Springer.
- Håkklev, S., Sharma, K., Slotta, J. & Dillenbourg, P. (2017). *Contextualizing the co-creation of artefacts within the nested social structure of a collaborative MOOC*. Twelfth European Conference on Technology Enhanced Learning EC-TEL.

- Quintana, R., Quintana, C., Madeira, C., & Slotta, J. D. (2016, May). Keeping Watch: Exploring Wearable Technology Designs for K-12 Teachers. In Proceedings of the 2016 CHI Conference Extended Abstracts on Human Factors in Computing Systems (pp. 2272-2278). ACM.
- Slotta, J.D., Hickey, D., Rosé, C.P., Dillenbourg, P., Najafi, H., Håkløv, S., Uttamchandi, S., & Quick, J.D. (2016). The Learning Sciences @ Scale: Current Developments in Open Online Learning. In C. K. Looi, J. L. Polman, U. Cress & P. Reimann, (Eds.), *Transforming Learning, Empowering Learners: The International Conference of the Learning Sciences (ICLS) 2016, Volume 2* (pp. 1114-1119). Singapore: International Society of the Learning Sciences.
- Slotta, J.D., Quintana, R. C., Acosta, A., Moher, T. (2016). Knowledge construction in the instrumented classroom: Supporting student investigations of their physical learning environment. In C. K. Looi, J. L. Polman, U. Cress & P. Reimann, (Eds.), *Transforming Learning, Empowering Learners: The International Conference of the Learning Sciences (ICLS) 2016, Volume 2* (pp. 1063-1070). Singapore: International Society of the Learning Sciences.
- Hod., Y., Charles, E., Acosta, A., Ben-Zvi, D., Chen, W., Choi, K., Dugdale, M., Kali, Y., Lenton, K., McDonald, S., Moher, T., Quintana, R. M., Rook, M., Slotta, J.D., Tietjen, P., Tamar Weiss, P. & Whittaker, C., (2016). Future Learning Spaces for Learning Communities: New Directions and Conceptual Frameworks In C. K. Looi, J. L. Polman, U. Cress & P. Reimann, (Eds.), *Transforming Learning, Empowering Learners: The International Conference of the Learning Sciences (ICLS) 2016, Volume 2* (pp. 1063-1071). Singapore: International Society of the Learning Sciences.
- Tissenbaum, M., & Slotta, J. (2016, June). Supporting real-time teacher orchestration in a smart classroom setting. In Real-Time Visualization of Student Activities to Support Classroom Orchestration. *Transforming Learning, Empowering Learners: The International Conference of the Learning Sciences (ICLS) 2016, Volume 2* (pp. 1043-1044), Singapore.
- Moher, T., Slotta, J.D., Acosta, A., Cober, R., Dasgupta, C., Fong, C., Gnoli, A., Silva, A., Lopez Silva, B., and Perritano, A. (2015) Knowledge Construction in the Instrumented Classroom: Supporting Student Investigations of Their Physical Learning Environment. Proceedings of the 11th International Conference on Computer Supported Collaborative Learning, Gothenburg, Sweden, June 2015, 631-638.
- Fong, C., Cober, R.M., Messina, R., Moher, T., Murray, J., Peebles, B., & Slotta, J.D. (2015, June). The 3R Orchestration Cycle: Fostering Multi-Modal Inquiry Discourse in a Scaffolded Inquiry Environment. In Lindwall, O., Häkkinen, P., Koschman, T. Tchounikine, P. & Ludvigsen, S. (Eds.). Exploring the Material Conditions of Learning: The Computer Supported Collaborative Learning (CSCL) Conference 2015, Volume 1 (pp. 39-46). Gothenburg, Sweden: The International Society of the Learning Sciences.
- Cober, R., Acosta, A., Moher, T., Kuhn, A., Quintana, C., & Slotta, J.D. (2015). The Use of Visual Evidence for Planning and Argumentation. Proceedings of the Eleventh Computer-Supported Collaborative Learning Conference, Gothenburg - Volume (forthcoming). International Society of the Learning Sciences (ISLS).
- Gil, E. & Slotta, J.D. (2015). Knowledge Community and Inquiry about Big Data among High School Students with Interactive Orchestrated Learning Space. Proceedings of the Eleventh Computer-Supported Collaborative Learning Conference, Gothenburg - Volume (forthcoming). International Society of the Learning Sciences (ISLS).
- Zimmerman, T., Najafi, H., Slotta, J.D., Acosta, A., O'Hara, M., & Krauss, A. (2015). Pioneer Valley Citizen Science Collaboratory: A CSCL Approach to Designing Citizen Science Projects. Proceedings

- of the Eleventh Computer-Supported Collaborative Learning Conference, Gothenburg - Volume (forthcoming). International Society of the Learning Sciences (ISLS).
- Cai, H. (2015), Gu, X., & Slotta, J.D. (2015). Orchestrating Visualization Tools for Supporting Collaborative Problem Solving in the Classroom: A Case Study. Proceedings of the Eleventh Computer-Supported Collaborative Learning Conference, Gothenburg - Volume (forthcoming). International Society of the Learning Sciences (ISLS).
- Acosta, A., Lui, M., & Slotta, J.D. (2014). Exploring Group-Level Epistemic Cognitions within a Knowledge Community and Inquiry Curriculum for Secondary Science. Proceedings of the Eleventh International Conference of the Learning Sciences. Volume 2. 673-680. International Society of the Learning Sciences (ISLS)
- Tissenbaum, M. & Slotta, J.D. (2014). Developing an Orchestrational Framework for Collective Inquiry in Smart Classrooms: SAIL Smart Space (S3). *Proceedings of the Eleventh International Conference of the Learning Sciences*. Volume 1. 831--838. International Society of the Learning Sciences (ISLS)
- Lui, M. & Slotta, J.D. (2014). Collective Immersive Simulations: A New Approach to Learning and Instruction of Complex Biology Topics. *Proceedings of the Eleventh International Conference of the Learning Sciences*. Volume 1. 301--308. International Society of the Learning Sciences (ISLS)
- Voogt, J., McKenney, S., Kali, Y., Breuleux, A., Cober, R., Slotta, J.D., Eylon, B.S., Itow, R., Könings, K., Laferrière, T., Linn, M.C., Markauskaite, L., Reeve, R., Sagy, O., So, H.J., Svihla, V., Tan, E., Matuk, C. (2014). Teachers as Designers. Proceedings of the Eleventh International Conference of the Learning Sciences. Volume 1. 14-15. International Society of the Learning Sciences (ISLS).
- Moher, T., Ching, C.C., Schaefer, S., Lee, V.R., Enyedy, N., Danich, J.A., Guerra, P., Gnoli, G., Pazmino, P.J., López Silva, B.A., Lyons, L., Perritano, A., Slattery, B., Tissenbaum, M., Slotta, J.D., Cober, R., Fong, C., Rubin, A. (2014). Becoming Reflective: Designing for Reflection on Physical Performances. *Proceedings of the Eleventh International Conference of the Learning Sciences*. Volume 3. 1273-1282. International Society of the Learning Sciences (ISLS).
- Lui, M., Kuhn, A., Acosta, A., Quintana, C., & Slotta, J. D. (2014). Supporting learners in collecting and exploring data from immersive simulations in collective inquiry. *Proceedings of ACM SIGCHI Conference on Human Factors in Computing Systems (CHI '14)*, (pp. 2103-2112). ACM Press.
- Najafi, H. & Slotta, J.D. (2013). Multiple Scaffolds to Promote Collective Knowledge Construction in Science Classrooms. *Proceedings of the Tenth Computer-Supported Collaborative Learning Conference, Madison*. Volume 2. 321-322. International Society of the Learning Sciences (ISLS).
- Zhao, N. & Slotta, J.D. (2013). Understanding the Teacher's Role in a Knowledge Community and Inquiry Curriculum. *Proceedings of the Tenth Computer-Supported Collaborative Learning Conference, Madison*. Volume 2. 201-204. International Society of the Learning Sciences (ISLS).
- Strijbos, J., Fischer, F., Cress, U., Looi, C. Puntambekar, S., Reimann, P., Rosé, C.P., & Slotta, J.D. (2013). From Research Instruments to Classroom Assessments: A Call for Tools to Assist Teacher Assessment of Collaborative Learning. *Proceedings of the Tenth Computer-Supported Collaborative Learning Conference, Madison*. Volume 2. 210-212. International Society of the Learning Sciences (ISLS).
- Tissenbaum, M. & Slotta, J.D. (2013). Scripting and orchestration of collaborative inquiry: An increasing complexity of designs. *Proceedings of the Tenth Computer-Supported Collaborative Learning Conference, Madison*. Volume 2. 367-368. International Society of the Learning Sciences (ISLS).

- Fong, C., Cober, R., Madeira, C., Messina, R., Murray, J., Peebles, B. & Slotta, J.D. (2013). Common Knowledge: Orchestrating Synchronously Blended F2F Discourse in the Elementary Classroom. *Proceedings of the Tenth Computer-Supported Collaborative Learning Conference, Madison. Volume 2.* 26-29. International Society of the Learning Sciences (ISLS).
- Fischer, F., Slotta, J.D., Tchounikine, P., Kollar, I., Wecker, C., Stegmann, C., & Chinn, C.(2013). Scripting and Orchestration: Recent Theoretical Advances. *Proceedings of the Tenth Computer-Supported Collaborative Learning Conference, Madison. Volume 1.* 564-571. International Society of the Learning Sciences (ISLS).
- Cober, R., McCann, C., Moher, T., & Slotta, J.D. (2013). Aggregating Students' Observations in Support of Community Knowledge and Discourse. *Proceedings of the Tenth Computer-Supported Collaborative Learning Conference, Madison. Volume 1.* 121-128. International Society of the Learning Sciences (ISLS).
- Lui, M. & Slotta, J.D. (2013). Exploring Evolutionary Concepts with Immersive Simulations. *Proceedings of the Tenth Computer-Supported Collaborative Learning Conference, Madison. Volume 1.* 304-311. International Society of the Learning Sciences (ISLS).
- Slotta, J. D., Tissenbaum, M., & Lui, M. (2013, April). Orchestrating of complex inquiry: three roles for learning analytics in a smart classroom infrastructure. In *Proceedings of the Third International Conference on Learning Analytics and Knowledge* (pp. 270-274). ACM.
- Smordal, O., Slotta, J.D., & Krange, I. (2012) Science Hub: A digital medium for supporting collective science inquiry. *Proceedings of the Tenth International Conference of the Learning Sciences. Sydney, Volume 2:* 9-16. International Society of the Learning Sciences (ISLS).
- Lui, M. & Slotta, J.D. (2012). Designing Immersive Environments for Collective Inquiry. *Proceedings of the Tenth International Conference of the Learning Sciences. Sydney. Volume 2:* 9-16. International Society of the Learning Sciences (ISLS).
- Cober, R., Fong, C., Gnoli, A., López Silva, B., Lui, M., Madeira, C., McCann, C., Moher, T., Slotta, J.D., & Tissenbaum, M. (2012). "Embedded Phenomena for Knowledge Communities: Supporting complex practices and interactions within a community of inquiry in the elementary science classroom." In *Proceedings of the Tenth International Conference of the Learning Sciences*, vol. 2, pp. 64-71. International Society of the Learning Sciences (ISLS).
- Cober, R., McCann, C., Slotta, J.D. & Moher, T. (2012). Materials that scaffold collective inquiry: The role of aggregate representations. *Proceedings of the Tenth International Conference of the Learning Sciences. Sydney, Volume 2:* 64-71. International Society of the Learning Sciences (ISLS).
- Fong, C., Pascual-Leone, R. & Slotta, J.D. (2012). The Role of Discussion in Orchestrating Inquiry. *Proceedings of the Tenth International Conference of the Learning Sciences. Sydney, Volume 2:* 64-71. International Society of the Learning Sciences (ISLS)
- Tissenbaum, M. & Slotta, J.D. (2012). Scripting Collective Inquiry in High School Physics. *Proceedings of the Tenth International Conference of the Learning Sciences. Sydney, Volume 2:* 118-125. . International Society of the Learning Sciences (ISLS).
- Wecker, C., Lazonder, A. W., Chiu, J. L., Madeira, C., Slotta, J. D., Mulder, Y. G., ... & Reimann, P. (2012). Building upon what is already there: The role of prior knowledge, background information, and scaffolding in inquiry learning. *Proceedings of the Tenth International Conference of the Learning Science. Sydney. Volume 2:* 17-24. . International Society of the Learning Sciences (ISLS).
- Madeira, C. & Slotta, J.D. (2012). Teacher Paradigm Shifts for 21st Practice Skills: The Role of Scaffolded Reflection Within A Peer Community. *Proceedings of the Tenth International Conference*

- of the Learning Sciences. Sydney. Volume 1: 227 – 234. International Society of the Learning Sciences (ISLS).*
- Tissenbaum, M. & Slotta, J.D. (2012). Scaffolding a Knowledge Community for High School Physics. *Proceedings of the Tenth International Conference of the Learning Sciences. Sydney. - Volume 2: 436-440. International Society of the Learning Sciences (ISLS).*
- Evans, M., Rick, J., Horn, M., Shen, C., Mercier, E., McNaughton, J., Higgins, S., Tissenbaum, M., Lui, M. & Slotta, J.D. (2012) Interactive Surfaces and Spaces: A Learning Sciences Agenda. *Proceedings of the 9th International Conference of the Learning Sciences, Sydney. Volume 2: 78-85. International Society of the Learning Sciences (ISLS).*
- Lui, M., Tissenbaum, M., & Slotta, J. D. (2011). Scripting collaborative learning in smart classrooms: Towards building knowledge communities. *Proceedings of the 9th International Conference on Computer-Supported Collaborative Learning (CSCL), Hong Kong. Volume 1, (pp. 430-437). International Society of the Learning Sciences (ISLS).*
- Slotta, J.D., Tissenbaum, M., Lui, M., Alagha, I., Burd, E., Higgins, S., Mercier, E., Fischer, F., Pilz, F., Kollar, I., Moher, T., Gnoli A., Jaeger, A., Wiley, J., López Silva, B., Evans, M., Motto, A., Brunger, A., Crider, Wilkins, J. (2011). Embedding CSCL in Classrooms: Conceptual and Methodological Challenges of Research on New Learning Spaces. *Proceedings of the Ninth International Computer-Supported Collaborative Learning Conference, Hong Kong. Volume 1. 1081-1089. International Society of the Learning Sciences (ISLS).*
- Madeira, C. & Slotta, J.D. (2011). Technology-mediated reflection and peer-exchange: Supports for teacher professional development communities. *Proceedings of the Ninth International Computer-Supported Collaborative Learning Conference, Hong Kong. Volume 1. 558-565. International Society of the Learning Sciences (ISLS).*
- Najafi, H., Zhao, N. & Slotta, J.D. (2011). Facilitating Knowledge Communities in Science Classrooms through Scripted Collaboration. *Proceedings of the Ninth International Computer-Supported Collaborative Learning Conference, Hong Kong. Volume 1. 996-997. International Society of the Learning Sciences (ISLS).*
- Zhao, N., Najafi, H. & Slotta, J.D. (2011). An Analysis of Teacher-Students Interactions in Three Science Classes: A Pilot Study. *Proceedings of the Ninth International Computer-Supported Collaborative Learning Conference, Hong Kong. Volume 1. 1002-1003. International Society of the Learning Sciences (ISLS).*
- Madeira, C. & Slotta, J.D. (2011). Visual Representations of Videotaped Interactions: Understanding Activity Patterns in the Classroom. *Proceedings of the Ninth International Computer-Supported Collaborative Learning Conference, Hong Kong. Volume 3, p. 1082-1083. International Society of the Learning Sciences (ISLS).*
- Li, K., Zhao, J., Slotta, J., & Law, N. (2011). Introducing China: Expanding the CSCL research community. In *Connecting Computer-Supported Collaborative Learning to Policy and Practice: CSCL 2011 Conf. Proc.-Community Events Proceedings, 9th International Computer-Supported Collaborative Learning Conf. (pp. 1045-1052).*
- Charles, E., Tissenbaum, M., Whittaker, C., Lui, M., Dugdale, M. & Slotta, J.D. (2011). Co-design of Collaborative Collective Knowledge Environment. *Proceedings of the Ninth International Computer-Supported Collaborative Learning Conference, Hong Kong. Volume 1. 641-645. International Society of the Learning Sciences (ISLS).*

- Slotta, J.D., Tissenbaum, M., Lui, M., Alagha, I., Burd, E., Higgins, S., Mercier, E., Fischer, F., Pilz, F., Kollar, I., Moher, T., Gnoli A., Jaeger, A., Wiley, J., López Silva, B., Evans, M., Motto, A., Brunger, A., Crider, Wilkins, J. (2011). Embedding CSCL in Classrooms: Conceptual and Methodological Challenges of Research on New Learning Spaces. Proceedings of the Ninth International Computer-Supported Collaborative Learning Conference, Hong Kong. Volume 1. 1081-1089. International Society of the Learning Sciences (ISLS).
- Tissenbaum, M., Lui, M., & Slotta, J.D. (2011). Orchestrating Collaborative Science Curriculum Across Formal and Informal Contexts. Proceedings of the Ninth International Computer-Supported Collaborative Learning Conference, Hong Kong. Vol 1. 1143-1148. International Society of the Learning Sciences (ISLS).
- Wang, H., Slotta, J.D., Zhao, N., Tissenbaum, M., Håkle, S. (2011). How the Creation of Open Educational Resources Can Impact the Creators: The Inspiration of the Studies of Learning Science in the West for the Studies of Educational Technology in China. Proceedings of the Ninth International Computer-Supported Collaborative Learning Conference, Hong Kong. Volume 1. 1308-1310. International Society of the Learning Sciences (ISLS).
- Najafi, H, & Slotta JD. (2010). Analyzing equality of participation in collaborative inquiry: toward a knowledge community. Proceedings of the 9th International Conference of the Learning Sciences, Chicago. Volume 1. 960–967. International Society of the Learning Sciences (ISLS).
- Peters, V. L., & Slotta, J. D. (2010). Analyzing collaborative knowledge construction in secondary school biology. In K. Gomez, L. Lyons, & J. Radinsky (Eds.), Learning in the Disciplines: Proceedings of the 9th International Conference of the Learning Sciences (ICLS 2010). Chicago. Vol. 1 (pp. 548-555). International Society of the Learning Sciences (ISLS).
- Peters, V. L., & Slotta, J. D. (2010). Content analysis of collaboratively constructed knowledge artifacts: Issues and opportunities for research. In K. Gomez, L. Lyons, & J. Radinsky (Eds.), Learning in the Disciplines: Proceedings of the 9th International Conference of the Learning Sciences (ICLS 2010). Chicago. Vol. 2 (pp. 117-124). International Society of the Learning Sciences (ISLS).
- Forbes, C. T., Madeira, C. A., & Slotta, J. D. (2010, June). Activity-theoretical research on science teachers' expertise and learning. In Proceedings of the 9th International Conference of the Learning Sciences-Volume 1 (pp. 651-658). International Society of the Learning Sciences.
- Slotta, J.D. & Linn. M.C. (2009). Designing effective collaborative inquiry: New technology frameworks. Proceedings of the Eighth International Conference on Computer Supported Collaborative Learning. Rhodes, Greece. Volume 2 (pp. 34-36). International Society of the Learning Sciences (ISLS).
- Tissenbaum, M., & Slotta, J. D. (2009). A new framework for smart classroom research: Co-designing curriculum, research and technology. In Proceedings of the 9th international conference on Computer supported collaborative learning-Volume 2 (pp. 91-93). International Society of the Learning Sciences.
- Peters, V. L., & Slotta, J. D. (2009). Co-designing curricula to promote collaborative knowledge construction in secondary school science. Proceedings of the Eighth International Conference on Computer Supported Collaborative Learning. Rhodes, Greece. International Society of the Learning Sciences. (ISLS).
- Najafi, H., & Slotta, J. D. (2009). Sustaining collaborative knowledge construction in graduate-level education: Examining design issues. In C. O'Malley, D. Suthers, P. Reimann, A. Dimitracopoulou (Eds.), Proceedings of the Eighth International Conference on Computer Supported Collaborative Learning. Rhodes, Greece. pp. 232-236. International Society of the Learning Sciences (ISLS).

- Madeira, C., & Slotta, J. D. (2009). Designing On-line Communities to Enhance Teacher Professional Development. In C. O'Malley, D. Suthers, P. Reimann, A. Dimitracopoulou (Eds.), *Proceedings of the Eighth International Conference on Computer Supported Collaborative Learning* pp. 232-236. Rhodes, Greece. International Society of the Learning Sciences (ISLS).
- Peters, V. L., & Slotta, J. D. (2008). Building wiki-based pedagogical scripts for knowledge communities. *International Perspectives in the Learning Sciences: Creating a learning world. Proceedings of the Eighth International Conference for the Learning Sciences*. Utrecht. pp. 237-244. International Society of the Learning Sciences (ISLS).
- Slotta, J. D., & Peters, V. L. (2008). A blended model for knowledge communities: Embedding scaffolded inquiry. *International Perspectives in the Learning Sciences: Creating a learning world. Proceedings of the Eighth International Conference for the Learning Sciences Utrecht*. pp. 343-350. International Society of the Learning Sciences (ISLS).
- Kollar, I., Fischer, F., & Slotta, J. D. (2008). Argumentation in web-based collaborative inquiry learning: Scripts for writing and scripts for talking aren't the same. In G. Kanselaar, V. Jonker, P. A. Kirschner, & F. Prins (Eds.), *International Perspectives in the Learning Sciences: Creating a Learning World. Proceedings of the Eighth International Conference for the Learning Sciences – ICLS 2008*. Utrecht. Vol. 1, pp. 453-460. International Society of the Learning Sciences (ISLS).
- Gobert, J., Slotta, J., Clarke, J., Dede, C., Gijlers, H., Saab, N., ... & Koedinger, K. (2007, July). Fostering peer collaboration with technology. In *Proceedings of the 8th international conference on Computer supported collaborative learning* (pp. 23-27). International Society of the Learning Sciences.
- Peters, V. L., & Slotta, J. D. (2007). Using wikis to create pedagogical scripts for knowledge communities. *Proceedings of the WikiSymposium*.
- Stegmann, K., Kollar, I., Zottmann, J., Gijlers, H., de Jong, T., Dillenbourg, P., Fischer, F. & Slotta, J.D. (2007). Towards the convergence of CSCL and inquiry learning: Scripting collaborative inquiry learning. In C. Chinn, G. Erkens, & S. Puntambekar (Eds.), *Mice, minds, and society*. New Brunswick, NJ. (pp. 829-830). International Society of the Learning Sciences.
- Kollar, I., Wecker, C., Fischer, F., Kohnle, C., & Slotta, J. D. (2007). Are core objectives of web-based collaborative inquiry learning already core learning prerequisites? The case of argumentation competences and computer literacy. In C. Chinn, G. Erkens, & S. Puntambekar (Eds.), *Mice, minds, and society: CSCL 2007* (pp. 379-381). New Brunswick, NJ: International Society of the Learning Sciences.
- Bell, T., Schanze, S., Graber, W., Slotta, J., Jorde, D., Berg, H.B., Stromme, A. (2005). Technology-Enhanced Collaborative Inquiry Learning: Four Approaches Under Common Aspects. In *The Proceedings of the European Science Education Research Association*.
- Kollar, I., Fischer, F., & Slotta, J. D. (2005). Internal and external collaboration scripts in web-based science learning at schools. In T. Koschmann, D. D. Suthers, & T.-W. Chan (Eds.), *Computer Supported Collaborative Learning 2005: The Next 10 Years!* Proceedings of the International Conference on Computer Supported Collaborative Learning 2005 (pp. 331-340). Mahwah, NJ: Lawrence Erlbaum.
- Berge, O. & Slotta, J.D. (2005). Learning Technology Standards and Inquiry-Based Learning. In the *Proceedings of the Informing Science and IT Education Joint Conference (InSITE)* pp. 151 - 152. Informing Science institute.

- Slotta, J. D., Jorde, D., Fischer, F., Linn, M., Mork, S., Kollar, I., et al. (2003). International collaborations in a web-based inquiry science environment: Promoting cross cultural research and collaborative curriculum. In B. Wasson, R. Baggetun, U. Hoppe, & S. Ludvigsen (Eds.), *Proceedings of the Computer Support for Collaborative Learning 2003. Designing for Change in Networked Learning Environments* (pp. 80-84). Boston: Kluwer Academic Publishers.
- Clancy, M., Slotta, J.D., Titterton, N. and Linn, M.C. (2003). New Roles for Students, Instructors, and Computers in a Lab-based Introductory Programming Course. *Proceedings of the 34th SIGCSE Technical Symposium on Computer Science Education*. 132-136.
- Slotta, J. D., Clark, D. B., & Cheng, B. (2002). Integrating Palm hand-held technology into the web-based inquiry science environment (WISE). In *Proceedings of the Conference on Computer Support for Collaborative Learning: Foundations for a CSCL Community* (pp. 542-543). International Society of the Learning Sciences.
- Gobert, J., Slotta, J., & Pallant, A. (2002). Collaborative Model-Building and Peer Critique via the Internet. In P. Bell, R. Stevens, & T. Satwic (Eds.), *Keeping Learning Complex: The Proceedings of the Fifth International Conference of the Learning Sciences (ICLS)*, pp. 536-537. Mahwah, NJ: LEA.
- Slotta, J. D., & Chi, M. T. H. (1996). Understanding constraint-based processes: A precursor to conceptual change in physics. In G. W. Cottrell (Ed.), *Proceedings of the Eighteenth Annual Conference of the Cognitive Science Society*. 306-307.

Reports and Reviews

- Slotta, J. D. (2014). Knowledge Community and Inquiry: New Opportunities for Scripting and Orchestration. Paper presented and published for the Network of Associated Programs in the Learning Sciences (NAPLES). International Society for the Learning Sciences. Munich.
- Madeira, C. and Slotta, J.D. (2008). Review of the Cambridge Handbook of the Learning Sciences. Curriculum Inquiry.
- 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. Report commissioned by The Milken Family Foundation (p. 1-116). Available at: <http://www.mff.org/pubs/HSscience.pdf>
- Linn, M.C., Slotta, J., Kessel, C, Lee, K., Levenson, J., Spitulnik, M. (2000). Teaching and Learning K-8 Mathematics and Science Through Inquiry: Program Reviews and Recommendations. Report commissioned by the North Central Regional Educational Laboratory (NCREL): <http://www.ncrel.org/engage/resource/resource/> (see math and science)

Articles in Preparation

- Cai, H. & Slotta, J.D. (in press). How to design suitable learning technology for authentic science classroom: reflection from WISE and Smart Classroom. *International Journal of Smart Technology and Learning*.
- Slotta, J.D. (in revisions). Knowledge Community and Inquiry: A Pedagogical Model. *Journal of the Learning Sciences*.
- Qin, W. & Slotta, J.D. (in revisions). Web 2.0 technologies used in higher education in China: A content analysis of journal articles from 2004 to 2015. *Asia Pacific Education Review*
- Zimmerman, T. and Slotta, J.D. (in revisions). Issue-based instruction in the marine sciences: a key to knowledge integration. In revisions for re-submission to *Science Education*.

Tissenbaum, M. & Slotta, J.D. (in review). Supporting Classroom Orchestration with Real-Time Feedback: A Role for Intelligent Agents, Teacher Dashboards, and Dynamic Displays of Community Knowledge. *International Journal of Computer Supported Collaborative Learning*.

Gil, E. & Slotta, J.D. (in preparation). Learning about Big Data among High School Students with Interactive Orchestrated Learning Space.

Media Products

Designer and Instructor of EdEx MOOC: Teaching with Technology and Inquiry. July 1 – August 15, 2015. 27 short videos produced, as well as a new collaborative design workbench for teachers.

Associate Producer, Community Healthworker Assistive Technology (CHAT) media: Educational videos for 16 different public health messages relating to HIV prevention, child and maternal health and nutrition (2013). Butler, L.M. (Producer); Ingles, R. (Director). Project Budget, \$275,000.

Associate producer, "Computers Teachers Peers: Science Learning Partners. Caribiner International. (1999). Dunakin, V. (Producer); Greer, T. (Director). Film budget = \$125,000. [Available from Lawrence Earlbaum Associates, Mahwah, NJ].

Invited Presentations

Keynote Addresses

Slotta, J.D. (2019). Smart classrooms for learning communities: Researching active learning curriculum and spaces. Keynote address given to the China AERA Research Consortium. April 4, Toronto, Ontario.

Slotta, J.D. (2019). Integrating digital media, arts and technology for K-12 classrooms: A learning community approach. Keynote address to the Toronto Kids Digital Festival. Ontario College of Arts and Design (OCADU). March 12, Toronto, Ontario

Slotta, J.D. (2017). Scripting and Orchestration of a Learning Community: The Role of Models and Learning Analytics. Keynote presentation for the Fall Festival of Teaching and Learning. Freudenthal Institute for Science and Mathematics Education. Utrecht, University. Utrecht, Netherlands.

Slotta, J. D. (2016). Scripting and orchestration of student inquiry in a knowledge community approach: How a pedagogical model can inform our design of individual, small group and whole class activities, materials and technology scaffolds. Keynote presentation to the European Association of Learning and Instruction, biennial meeting of the Inquiry (20) and Argumentation (26) SIGs. Aug 22-24. Ghent, Belgium.

Slotta, J.D. (2015). *Orchestrating complex inquiry: Three roles for learning analytics in a smart classroom infrastructure*. Keynote presentation to the Social Media in Science, GMW2015. Sept 2 – 4. Munich, Germany.

Slotta, J.D. (2015). *Designing and Orchestrating Higher Education Courses for Collective Inquiry*. Keynote presentation to University of Toronto, Scarborough, for Teaching and Learning day. Designing and orchestrating higher education courses for collective inquiry. April 8. Scarborough, Canada.

Slotta, J.D. (2013). *New forms of pedagogy and practice for 21st century science classrooms*. Keynote presentation to the 2013 meeting of the Conference for Supporting Active Learning and Technological Innovation in Science Education (SALTISE). June 10-11. Montreal, Canada.

- Slotta, J.D. (2010). *Researching collective inquiry: Smart classrooms and knowledge communities*. Founding keynote presentation delivered to the inaugural meeting of the China-Canada Joint Conference on Education and Technology: Toward a Global Research Community. Oct. 31. Huizhou, China.
- Slotta, J.D. (2010). *Classrooms, Knowledge Communities and Other Complex Systems*. Keynote presentation to the NSF Complex Systems in the Geosciences workshop. April 18. Northfield, Minnesota.
- Slotta, J. D. (2009). *New ways of teaching and learning with technology*. "KMDI at 13" keynote lecture. University of Toronto. Feb 26. Toronto, Canada.
- Slotta, J.D. (2008). *Teaching and learning in technology enhanced classrooms*. Invited Theme Presentation to the International Conference on Computers in Education. Oct. 27. Taipei, Taiwan.
- Slotta, J.D. (2006). *Technology Enhanced Learning Environments: Scaffolding inquiry in the classroom and in the scientific community*. Keynote address to the Kaleidoscope Inquiry Workshop. May 29. University of Twente, The Netherlands.
- Slotta, J.D. (2004). *International Comparisons and collaborations in a Web-based Inquiry Science Environment*. Keynote Address to the Institute of Educational Technology, South China Normal University. June 23. Guangzhou, China.
- Slotta, J.D. (2004). *Technology Enhanced Learning in Science (TELS) - A Flexible Platform for Research of Learning Technologies*. Keynote Address to the NSF-Funded NAGT Workshop: Teaching Geoscience with Visualizations: Using Images, Animations and Models Effectively. Feb 26. Northfield, MN.
- Slotta, J.D. (2003). Open-source Web-based Learning (OWL) – Supporting Educational Research, Technology Development, and Classroom Communities. Keynote Address to the eLearning Forum. Oct. 19. Berkeley, CA.
- Slotta, J.D. (2003). Designing Powerful Instruction for the Web. Keynote address to the Advances in Teaching and Learning Conference, The University of Texas at Houston Medical Center. Feb 14. Houston, TX.
- Slotta, J.D. (2002). *Integrating Technology into our classrooms: challenges, opportunities, and possible partnerships*. Keynote address to the annual meeting of the Technology Challenge Literacy Fund. June 17. Las Vegas, NV.
- Slotta, J.D. (2000). *Using technology effectively as lifelong science learners*. Keynote address to the Annual Meeting of the National Institutes of Health (NIH), Science Education Partnership Awards. Nov. 5. Bethesda, MD.

Colloquia and Invited Talks

- Slotta, J.D. (2019). *Designing for Collective Inquiry: Theoretical Models, Smart Classrooms, Embedded Phenomena and Other Adventures*. Invited presentation to TIER-ED discussion series. University of Illinois, Champagne Urbana. April 23. Champagne, IL.
- Slotta, J.D. (2018). *Scripting and Orchestration for Learning Communities*. Invited presentation to the Great Diseases Research Lab, Tufts University. January 9. Boston, MA.
- Slotta, J.D. (2017). *Smart Classrooms for Learning Communities*. Invited presentation to the Concord Consortium, Nov. 30. Concord, MA.

- Slotta, J.D. (2015). *Knowledge Construction in the Instrumented Classroom: Supporting Student Investigations of Their Physical Learning Environment*. Invited presentation to the Toronto User Experience Group, University of Toronto, Dec. 8, Toronto, Canada.
- Slotta, J.D. (2015). *Common Knowledge: Supporting Teacher-led Discourse in a Knowledge Community*. Invited presentation to the conference for Multidisciplinary Advances in Reading and Writing for Science Education. May 8. New York, NY.
- Slotta, J.D. (2014). *Emerging Technologies for Classroom Learning*. Invited Presentation to South China Normal University. November 18. Guangzhou, China.
- Slotta, J.D. (2014). *Knowledge media for Learning: New technological affordances*. Invited presentation to Yunnan normal University. November 20. Kunming, China.
- Slotta, J.D. (2014). *New roles for technology and physical environments in supporting collective inquiry*. Invited presentation to the 2014 meeting of the Conference for Supporting Active Learning and Technological Innovation in Science Education (SALTISE). June 12. Montreal, Canada.
- Slotta, J.D. (2014) - The Scalable Architecture for Interactive Learning (SAIL): An extensible framework for distributed and collective forms of inquiry. Invited presentation to the Cyberlearning Summit, NSF-sponsored conference. June 9. Madison, WI.
- Slotta, J.D. (2013). *If textbooks are dead, what will rise from the ashes?* Invited presentation to the People For Education Conference. Rotman Business School. University of Toronto. November 2. Toronto, Canada.
- Slotta, J.D. (2013). Smart Classrooms for Knowledge Communities - New Pedagogical Models and Technology Architectures for 21st Century Learning. Tufts School of Engineering. April 22. Boston, MA.
- Slotta, J.D. (2012). *The Challenges of Understanding Emergent Phenomena: Implications for Science Education*. Invited presentation to ConChaMo 3: Conceptual Change and Ontological Issues. Dec 3. Helsinki, Finland.
- Slotta, J.D. (2012). *Psychology and Education Lecture: Smart classrooms and Knowledge Communities*. Invited presentation to the Ludwig Maximilians University departments of psychology and education. Feb 8. Munich, Germany.
- Slotta, J.D. (2011). Theoretical perspectives on knowledge, inquiry and community. New research on a model for complex collective inquiry. Colloquium talk for Intermedia, University of Oslo. Nov. 9. Oslo, Norway.
- Slotta, J.D. (2011). *Knowledge Community and Inquiry: Four iterations of a design research study*. Colloquium presentation to faculty of psychology, Ludwig Maximilians University. Oct. 10. Munich, Germany.
- Slotta, J.D. (2011). *New Technology Environments for Distributed Learning*. Talk given to the Intermedia Lab research group, University of Oslo. Sept. 13. Oslo, Norway.
- Slotta, J.D. (2011). *Smart Classrooms for Knowledge Communities: Introducing KCI and S3*. Presentation given to the Department of Educational Technology, Prof. Yu Shengquan. Beijing Normal University. July 15, 2011. Beijing, China.
- Slotta, J.D. (2010). *Emerging technologies for support of distributed knowledge communities*. presentation to the Bloomberg School of Nursing, Center for Excellence. November 16. University of Toronto.

- Slotta, J.D. (2010). *Inquiry, Collaboration, and Smart Classrooms*. Invited presentation to Beijing Normal University. November 4. Beijing, China
- Slotta, J.D. (2010). *Researching Smart Classrooms and Knowledge Communities*. Invited presentation to South China Normal University. November 3. Guangzhou, China
- Slotta, J.D. (2010). *Researching collective inquiry*. Invited presentation to East China Normal University. October 29. Shanghai, China
- Slotta, J.D. (2010). New technology formalisms and design approaches. Supporting the orchestration of complex collaboration scripts. Invited talk for the IntermediaLab, University of Oslo, August 27.
- Slotta, J.D., Tissenbaum, M., & Lui, M. (2010). *Co-design of collective inquiry curriculum: Technology frameworks and pedagogical models*. Invited lecture to the University of Gent, Belgium. August 24.
- Slotta, J. D., Peters, V. & Najafi, H. (2009). *Supporting knowledge communities: A pedagogical framework*. Invited talk for the Second Biennial Stellar Alpine Rendez-vous. Nov. 30 – Dec. 3. Garmish Parten-Kirchen, Germany.
- Slotta, J. D., Tissenbaum, M. & Lui, M. (2009). *Invited talk for Smart Classrooms: Enabling Complex Pedagogical Scripts*. Paper presented at the Second Biennial Stellar Alpine Rendez-vous. Nov. 30 – Dec. 3. Garmish Parten-Kirchen, Germany.
- Slotta, J. D. (2009). *Scientific visualizations: The need for integration within an inquiry context*. Colloquium presentation to the Knowledge Media Design Institute seminar on visualizations and learning. May 28. University of Toronto.
- Slotta, J. D. and Haklev, S. (2009). *Open educational resources around the world. Education Commons Special Event*. March 12. Knowledge Innovation Lab, University of Toronto.
- Slotta, J.D. and Anwar, A. (2009). *M-Learning: Taking the Show on the Road. Education Commons Special Event*. Feb 12. Knowledge Innovation Lab, University of Toronto.
- Slotta, J.D. (2008). The Use of Wikis in Collaborative Knowledge Generation And Critical Thinking. RCAT Seminar. November 26. The University of Toronto
- Slotta, J.D. (2008). *Technology-enhanced Learning for Knowledge Communities*. Brownbag colloquium presented to the Center for Math, Science and Technology, OISE. November 5. University of Toronto.
- Slotta, J.D. (2008). *A blended model for collaborative knowledge construction in science classrooms*. Presentation to the annual meeting of Technology Enhanced Learning in Science (TELS) center. Aug. 4. Berkeley, California.
- Slotta, J.D. (2008). *Smart Classrooms and Scalable Architectures*. Presentation to the Intermedia Lab, University of Oslo. July 2. Oslo, Norway.
- Slotta, J.D. (2008). *New ways of teaching and learning in the Web 2.0 Era: the role of technology and open source communities*. Presentation to the Center for Information Technology in Education, Faculty of Education, Honk Kong University. April 14. Hong Kong.
- Slotta, J.D. (2008). New ways of teaching and learning in smart classrooms. SMT Brownbag colloquium. April 2. University of Toronto.
- Slotta, J.D. (2008). *Teaching with technology in nursing education*. Colloquium presentation to the Bloomberg School of Nursing. March 12. University of Toronto.

- Slotta, J. D. (2007). *Making better progress in the next ten years: Open source and online community*. Invited presentation to the Kaleidoscope Alpine Rendez-vous conference. Jan. 23 Villars, Switzerland.
- Slotta, J.D. (2007). *Social Networking in the Learning Sciences*. Presentation for Social Networking Day. Nov. 2. University of Toronto.
- Slotta, J. D. (2007). *Classroom of the future: How do we arrive there?* Colloquium presentation May 23. Ludwig Maximilians University, Munich, Germany.
- Slotta, J.D. (2007). *New opportunities for teaching with technology*. Invited lunchtime colloquium. Institute for Child Studies. January 31. Toronto.
- Slotta, J.D. (2007). *Reflection on the semiotic relationship between learning technologies and research programs*. Research colloquium presented to Sandoval, Kafai and Enyedy lab. Feb 26. Los Angeles.
- Slotta, J.D. (2006). *A Scalable architecture for interactive learning: Enabling international partnerships*. Invited colloquium to the Intermedia Center, University of Oslo. June 1. Oslo, Norway.
- Slotta, J.D. (2006). Open source and open content partnerships in education: The promise of dynamic communities. NetCOIL Research Colloquium. August 28. OISE, University of Toronto.
- Slotta, J.D. (2006). Technology Enhanced Learning Environments: Scaffolding inquiry in the classroom and in the scientific community. HDAP Seminar Talk. November 8, 2006. OISE, University of Toronto.
- Slotta, J.D. (2006). Next steps in technology enhanced learning: Building an exchange community for designers and researchers. SMT Luncheon Brownbag. November 16, 2006. OISE, University of Toronto.
- Slotta, J.D. (2005). *Toward a framework for interoperable learning technologies*. Presentation to the Intermedia Institute, University of Oslo. August 5. Oslo, Norway.
- Slotta, J.D. (2004). Open-source Web-based Learning (OWL) – Design goals for an architecture that supports an open source community of developers and an open content community of authors and instructors. Kick-off address to the OWL Design retreat, funded by IBM faculty award and NSF. March 17-19. Monterey, CA.
- Slotta, J.D. (2004). *Developing Scalable Collaborative Inquiry Projects in a Web-based platform*. Invited presentation to the Collaborative Reasoning Research Project (Richard Anderson, PI). University of Illinois, Urbana Champagne. Mar. 2-3.
- Slotta, J.D. (2003). Integrating Content from Digital Libraries: How can research-based innovations in curriculum and assessments leverage the wealth of content in NSDL? Presentation to the Science Education Resource Center,. October 28. Northfield, MN.
- Slotta, J.D. (2002). *WISE Technology for International Partnerships*. Presentation to special Japanese delegation for educational technology partnerships. March 8. Berkeley, CA.
- Slotta, J.D. (2002). *The Web-based Inquiry Science Environment: Technology, Curriculum and Teacher Supports*. Presentation to the Superintendents' Coalition Conference: Leadership in Learning: Advancing Equity, Quality Teaching and Learning, and Student Achievement in SMT Classrooms. Feb. 28. Palo Alto, CA.

- Slotta, J.D. (2001). *The Web-based Inquiry Science Environment (WISE): Technology, Curriculum and Professional Development*. Invited presentation to the Educational Resources Group, Monterey Bay Aquarium. March 12. Monterey, CA.
- Slotta, J.D. (2001). *Online community technologies for curriculum authoring and professional development*. Invited presentation to the Workshop on Cognition and Instruction, February 24. Toyota City, Japan.
- Slotta, J.D. (2001). *The Web-based Inquiry Science Environment (WISE): Inquiry and technology for science curriculum*. Invited presentation to the Cognitive Studies group, Chukyo University. February 23. Nagoya Japan.
- Linn, M.C, and Slotta, J.D. (2001). *The Web-based Inquiry Science Environment (WISE): Inquiry for Lifelong Learning*. Spotlight Presentation at NECC: The National Educational Computing Conference. June 25 - 29. Chicago, IL.
- Slotta, J.D. and Linn, M.C. (2001). *Partnerships with the Web-based Inquiry Science Environment*. Presentation to the University of California DiMI initiative conference, October 12. Palo Alto, CA.
- Slotta, J.D. (2000). *Connecting classrooms from Minnesota and Norway: Wolves in our backyards*. Invited presentation to The Norwegian Association for wolf and predator research, special assembly at the Wolf 2000 conference. February 23. Duluth, Minnesota.
- Slotta, J.D. (2000). *How can we translate current science controversies into effective science curriculum?* Invited presentation to the "Frogs as Bio-indicators" National Education Summit. April 16-17. St. Paul, Minnesota.
- Slotta, J.D. (2000). *Supporting WISE Teachers in Norway and the US*. Invited presentation to the NKUL Conference: The New Technologies: Challenges and opportunities for educational settings at the Norwegian University of Science and Technology. May 12. Trondheim, Norway.
- Slotta, J.S. (2000). *Adding "WISE" activities to your science curriculum*. Invited presentation to the American Physiology Society Summer Program. July 20, 2000. Falls Church, VA.
- Slotta, J.D. (2000). *The Web-based Integrated Science Environment (WISE): Technology, curriculum, and teacher communities*. Graduate School of Education, University of California at Berkeley Colloquium Series, December 4. Berkeley, CA.
- Slotta, J.D. (1999). *How can the Internet help teachers implement Inquiry Activities in their science curriculum?* Invited lecture at California State University, San Bernardino, January 23. San Bernardino, CA.
- Slotta, J.D. (1999). *The Web-based Integrated Science Environment; Perspectives on research and design*. Invited presentation to Stanford University Seminar on Design of Learning Environments. November 9, 1999. Palo Alto, CA.
- Slotta, J.D. (1996). *Instruction for Conceptual Change: The Success Story of Ontology Training*. Graduate School of Education, University of California at Berkeley Colloquium Series, November 24. Berkeley, CA.,

Workshops

- Moher, T., Lui, M. & Slotta, J.D. (2019). Workshop on Embedded Phenomenon and design. Pre-Conference Workshop at the International Society of the Learning Sciences (ISLS). June 10, Lyons, France.

- Prieto, L.P., Dimitriadis, Y., Harrer, A., Milrad, M., Nussbaum, M., Slotta, J.D. (2015). The Orchestrated Collaborative Classroom: Designing and Making Sense of Heterogeneous Ecologies of Teaching and Learning Resources. Pre-Conference Workshop at the International Society of the Learning Sciences (ISLS). June 6. Gothenburg, Sweden.
- Smordal, O. & Slotta, J.D. (2014). *Enacting science inquiry scripts across contexts and in hybrid spaces*. International Workshop on Technologies for Scripted Collaboration. The 6th International Conference on Intelligent Networking and Collaborative Systems. September 10-12, Salerno, Italy.
- Dimitriadis, Y., Slotta, J.D., & Wittaker, C. (2013). *Scripting and orchestration for higher education courses*. Workshop delivered for the meeting of the Conference for Supporting Active Learning and Technological Innovation in Science Education (SALTISE). Montreal, Canada. June 10.
- Martinez, R., Slotta, J.D., Dillenbourg, P., Clayphan, A., Tissenbaum, M., Schwendimann, B. & Ackad, C. (2012). Digital Ecosystems for Collaborative Learning: Embedding Personal and Collaborative Devices to Support Classrooms of the Future. Pre-Conference Workshop: Proceedings of the Tenth International Conference of the Learning Sciences - Volume 2: 588-589. International Society of the Learning Sciences (ISLS).
- Slotta, J.D. (2011). Science education: *Technology, research and teaching practices*. Workshop presented to the Ludwig Maximilians University Masters of Excellence and Learning Sciences graduate program. October 12-13. Munich, Germany.
- Slotta, J.D., Tissenbaum, M. & Lui, M. (2011). Researching Collective Inquiry: Smart Classrooms and Knowledge Communities. Paper presented at the first annual Workshop for Cyberlearning Tools for STEM Education. Berkeley, CA. March 8-9.

• 2006 - 2010 •

- Zhao, J., Li, K., Wang, L. and Slotta, J.D. (2010). *Inaugural China-Canada Workshop on Technology and Education: Toward a Global Research Community*. October 31 – November 2. Huizhou University, China.
- Smordal, O., Slotta, J.D., Mercier, E. & Pierroux, P. (2010). *Workshop on distributed virtual environments for knowledge communities in learning sciences research*. August 28 – Sept. 1, University of Oslo.
- Evans, M., Jochen, J., Mercier, E., Wise, A., Slotta, J.D., Pierroux, P. (2010). *Collaborative Learning with Interactive Surfaces*. Pre-conference workshop at the International Conference of the Learning Sciences. June 28. Chicago, Illinois.
- Slotta, J.D., Linn, M. C. and Madeira, C. (2010). A Technology community for the learning sciences. Canada-California Strategic Innovation Partnership (CCSIP) workshop. June 4-7, 2010. Kawartha Lakes, Ontario.
- Slotta, J.D., Linn, M. C. and Madeira, C. (2009). A Technology community for the learning sciences. Canada-California Strategic Innovation Partnership (CCSIP) workshop. Oct. 17-20. Monterey, California.
- Slotta, J.D. and Zhao, N. (2009). *China-University of Toronto research partnerships*. Workshop with visiting Chinese scholars and Education Ministry officers, and 6 University of Toronto faculty. August 12-14. Toronto.
- Linn, M. C., Beneman, K., Madeira, C. and Slotta, J.D. (2009). *Logging Opportunities for Teacher Professional Development in Science*. Annual meeting of the Technology-enhanced Learning in Science (TELS) center. August 3-7. Minneapolis, MN.

- Slotta, J.D. and Aleahmad, T. (2008). Technology community for open source and innovation. Educoder launch and retreat. October 24-27. Kawartha Lakes, Ontario.
- Linn, M. C., Slotta, J.D., Tinker, R. (2008). *Research and Technology convergence: Supporting the TELS knowledge community*. Annual meeting of the Technology-enhanced Learning in Science (TELS) center. August 1-8. Berkeley, California.
- Slotta, J.D., Aleahmad, T., and Bannasch, S. (2008). *The Scalable Architecture for Interactive Learning (SAIL) - New tools and communities for research*. Workshop presentation at the International Conference of the Learning Sciences (ICLS). June 25-26. Utrecht, The Netherlands.
- Aleahmad, T., Slotta, J.D., and Van Joolingen, W. (2007). *Supporting the convergence of CSCL and inquiry: Architecture, resources and community*. Workshop presentation to the Computer Supported Collaborative Learning (CSCL) conference, Rutgers, NJ.
- Slotta, J. D. (2007). *Scripting Environments for Collaborative Inquiry: New Architectures & New Opportunities*. Kaliedoscope Alpine Rendez-Vous workshop on Scripting and Collaborative Learning. January 23. Villars, Switzerland.
- Kollar, I., Fischer, F., and Slotta, J.D. (2007). *Web-based collaborative inquiry learning in German secondary schools - Effects of internal and external collaboration scripts*. Workshop presentation to the Computer Supported Collaborative Learning (CSCL) conference, Rutgers, NJ.
- Slotta, J.D. (2007). *Supporting the convergence of CSCL and inquiry: Architecture, resources and community*. Workshop presentation to the Computer Supported Collaborative Learning (CSCL) conference. Rutgers, NJ.
- Aleahmad, T., Slotta, J.D., and Van Joolingen, W. (2007). *Authoring frameworks for integrating collaborative learning technologies*. Workshop coordinated at the Computer Supported Collaborative Learning (CSCL) conference. Rutgers, NJ.
- Slotta, J. D. (2007). Evolving the classrooms of the future: *The interplay of pedagogy, technology and community*. Kaliedoscope Alpine Rendez-Vous workshop on classrooms of the future. January 25. Villars, Switzerland.

• 2000- 2005 •

- Slotta, J.D. & O'Mahony, M. (2005). *TELS curriculum planning workshops for teachers*. University of Toronto Schools, July 5.
- Linn, M.C., Slotta, J.D. & Tinker, R. (2005). *Technology Enhanced Learning in Science (TELS) Retreat*. University of California, Berkeley. August 1-5.
- Linn, M.C., Slotta, J.D. & Tinker, R. (2004). *Technology Enhanced Learning in Science (TELS) Retreat*. North Carolina State University, Durham, NC. August 6-9.
- Slotta, J.D., and Aleahmad, T. (2005). *The Scalable Architecture for Interactive Learning (SAIL) -- Background, design and demonstration*. Annual meeting of the Technology-enhanced Learning in Science (TELS) center. July 13-17. State College, Pennsylvania
- Slotta, J.D. (2004). *Researching the Web-based Inquiry Science Environment: Integrating technology and inquiry into the science curriculum*. Presentation to the "Bringing Research on Learning to the Geosciences" workshop. May 7-9. Northfield, Minnesota.
- Slotta, J.D. & Linn, M.C. (2003). *Evidence-based Planning Workshop for Teachers*. University of California, Berkeley. August.
- Slotta, J.D. (2003). *The Educational Accelerator: Partnership Opportunities in the TELS Center*. Presentation to NSF-DFG collaboration workshop., Nov. 13-15. Tuebingen, Germany.

- Slotta, J.D. & Linn, M.C. (2003). *Evidence-based Planning Workshop for Teachers*. University of California, Berkeley. August.
- Slotta, J.D. (2002). *The WISE Rock Cycle Project: New methods of assessment to support technology-enhanced earth science curriculum*. Presentation to the American Geophysical Union Meeting: Using Global Datasets in Teaching Earth Processes. December 5. San Francisco, CA.
- Slotta, J.D. (2002). *Evidence-based Planning Workshop for Teachers*. University of California, Berkeley. August.
- Slotta, J.D. (2002). *Inquiry and Technology for Secondary Science* - Hamline University. June 8-10
- Bell, P., Linn, M.C. & Slotta, J.D. (2001). WISE-SCOPE Summer Workshop for Teachers. University of Washington, Seattle. August 1-4.
- Slotta, J.D. (2000). *Inquiry and Technology Integration using WISE*. Minnesota Science Teachers, Assoc., Duluth, MN. Mar 15.
- Slotta, J.D. (2000). *WISE and Palm for Science Inquiry*. Denver Public Schools District. Denver, CO. April 6.
- Slotta, J.D. (2000). *WISE and Palm for Science Inquiry*. Desert Sands Unified School District. Palm Springs, CA. April 15.
- Slotta, J.D. (2000). *Summer Workshop for Teachers*. American Physiology Society Annual Summer Program. May 15-19.
- Slotta, J.D. (2000). *Inquiry and Technology for Secondary Science* - Hamline University. June 4.
- Bell, P., Linn, M.C. & Slotta, J.D. (2000). *WISE-SCOPE Summer Workshop for Teachers*. University of Washington, Seattle. August 3-5.
- Slotta, J.D. (2000). *How do WISE Curriculum and Technology help make thinking visible?* Presentation to the NSF Visualization and Modeling Workshop, Oct. 25. Arlington, VA.

• 1990-1999 •

- Slotta, J.D. (1999). *American Physiology Society Summer Workshop for Teachers*. American Physiology Society Annual Summer Program. May 5-9.
- Slotta J.D. & Linn., M.C. (1999). *WISE Summer Workshop for Teachers*. University of California, Berkeley. June 23-28
- Slotta J.D. & Linn., M.C. & Bell, P. (1998). *WISE Summer Workshop for Teachers*. University of California, Berkeley. August.
- Slotta, J., Bell, P., Davis, E., Slotta, J.D., Hoadley, C. & Linn., M.C. (1997). *KIE Summer Workshop for Teachers*. University of California, Berkeley. August 15-20.
- Bell, P., Davis, E., Slotta, J.D., Hoadley, C. & Linn., M.C. (1996). *KIE Summer Workshop for Teachers*. University of California, Berkeley. August 5-8.
- Slotta, J.D. (1993). *Cognitive Science, Curriculum and Instruction: The implications of cognitive research for instruction and facilitation methods*. Invited presentation to the Institute of Cultural Affairs workshop on training and facilitation. Denver, Colorado. July 21-23.

Conference Presentations

* denotes a presentation that also appears above as a peer reviewed proceedings publication

• 2018 •

Slotta, J.D. (2019). The Knowledge Community and Inquiry Model: Synthesizing a Decade's Research for a Widening Audience. Session Chair, a 10-Year retrospective session presented to the at the annual meeting of the American Educational Research Association. April 5-9. Toronto, ON, Canada.

Semerjian, Duesbery & Slotta, J.D. (2019). A Visual Measure of Science Identity: Instrument Development Pilot. Paper presented to the at the annual meeting of the American Educational Research Association. April 5-9. Toronto, ON, Canada.

Morales, M., Gates, M., Goldner, M. & Slotta, J.D. (2019). Embracing the Authentic Unknown: How Science Classrooms Can Benefit From Arts-Based Notions of Emergence. Paper presented to the at the annual meeting of the American Educational Research Association. April 5-9. Toronto, ON, Canada.

Gates, M., Morales, M., Goldner, M., Moher, T. & Slotta, J.D. (2019). Keeping the M in STEM: Supporting Mathematical Content in an Integrated Geoscience Unit. Paper presented to the at the annual meeting of the American Educational Research Association. April 5-9. Toronto, ON, Canada.

Najafi, H., Haklev, S., Acosta, A. & Slotta, J.D. (2019). Opportunities for Collaboration and Reflection in a Teacher Professional Development MOOC. Paper presented to the at the annual meeting of the American Educational Research Association. April 5-9. Toronto, ON, Canada.

*Semerjian, A., Duesbery, L., & Slotta, J.D. (2018). The visual test of science identity (VTSI). *The International Conference of the Learning Sciences (ICLS) 2018*. London: International Society of the Learning Sciences.

*Acosta, A., & Slotta, J. (2018). Representations of progress in a learning community curriculum for grade 12 biology. *The International Conference of the Learning Sciences (ICLS) 2018*. London International Society of the Learning Sciences, Inc. ISLS.

*Linn, M. C., Eylon, B. S., Kidron, A., Gerard, L., Toutkoushian, E., Ryoo, K. K., ... & Barnes, J. (2018). Knowledge Integration in the Digital Age: Trajectories, Opportunities and Future Directions. In *Proceedings of International Conference of the Learning Sciences, ICLS (Vol. 2, No. 2018-Jun, pp. 1259-1266)*. ISLS.

Slotta, J.D., Gates, M. & Moher, T. (2018). Embedded Simulations as a Bridging Activity for Collective Inquiry in Earth Science. Paper presented to the at the annual meeting of the American Educational Research Association. April 13-17. New York, NY.

Slotta, J.D., Linn, M.C., & Horwitz, P. (2018). Robert Tinker's Initiative in Technology-Enhanced Learning in Science. Paper presented to the at the annual meeting of the American Educational Research Association. April 13-17. New York, NY.

Serevetas, M & Slotta, J. D. (2018). Knowledge Integration Within an Inquiry Community. Paper presented to the at the annual meeting of the American Educational Research Association. April 13-17. New York, NY.

• 2017 •

*Acosta, A. & Slotta, J.D., (2017). Scripting and Orchestrating Learning Communities: A Role for Learning Analytics. Paper presented to the 12th International Conference on Computer Supported Collaborative Learning (CSCL) 2017, June 18-22. Philadelphia, PA.

- Haklev, S. & Slotta, J.D. (2017). *A principled approach to the design of collaborative MOOC curricula*. Fifth European MOOCs Stakeholder Summit, Madrid, Spain.
- *Haklev, S., Sharma, K., Slotta, J.D., & Dillenbourg, P. (2017).. *Contextualizing the co-creation of artefacts within the nested social structure of a collaborative MOOC*. EC-TEL, Tallinn.
- *Quintana, R., Moher, T., & Slotta, J. (2017). The Role of Visual Representations Within the Scientific Practice of Explanation. Paper presented to the 12th International Conference on Computer Supported Collaborative Learning (CSCL) 2017, June 18-22. Philadelphia, PA.
- Najafi, H., Haklev, S., Evans, R., & Slotta, J.D. (2017). Fostering Reflection in an Open Course for Teacher Professional Development. Paper presented at the Canadian Society for Studies in Education (CSSE). May. 28 – 31. Toronto.
- *Håklev S., Slotta J.D. (2017) A Principled Approach to the Design of Collaborative MOOC Curricula. In: Delgado Kloos C., Jermann P., Pérez-Sanagustín M., Seaton D., White S. (eds) Digital Education: Out to the World and Back to the Campus. EMOOCs 2017. Lecture Notes in Computer Science, vol 10254. Springer, Cham
- Slotta, J.D., Acosta, A., & Zimmerman, T. (2017). Social Network Scaffolds for a Citizen Science Community. Paper presented at the annual meeting of the American Educational Research Association. April 27 – May 1. San Antonio, TX.
- Quintana, R.C. & Slotta, J.D. (2017). Visual Timelines: A Proposed Approach to Transcription for Researchers Using Design-Based Research Methods. Paper presented at the annual meeting of the American Educational Research Association. April 27 – May 1. San Antonio, TX.
- Slotta, J.D (2017). Invited Panelist to AERA Presidential Session on Diversity and Equity in STEM Education. Presented at the annual meeting of the American Educational Research Association. April 27 – May 1. San Antonio, TX.
- Slotta, J.D., Lui, M., Quintana, R. & Moher, T. (2017). Modeling WallCology: Technology Scaffolds for Building, Predicting, and Reasoning Around Models of Simulated Ecosystems. Structured Poster Session: Supporting Science as a Modeling Practice in the Classroom Through the Lens of Next Generation Science Standards, presented at the annual meeting of the American Educational Research Association. April 27 – May 1. San Antonio, TX.

• 2016 •

- *Quintana, R., Quintana, C., Madeira, C., & Slotta, J.D. (2016). Keeping Watch: Exploring Wearable Technology Designs for K-12 Teachers. In Proceedings of the 34th International Conference on Human Factors in Computing Systems: CHI 2016 Late-Breaking Work (CHI). (pp. 2272-2278). May 9-12. San Jose, California.
- Madeira, C., Quintana, R. & Slotta, J.D. (2016). *Wearable Technology for Teachers: Support for Classroom Orchestration*. Paper Presentation at the annual meeting of the American Educational Research Association, April 8-12, Washington, DC
- Quintana, R., Madeira, C. & Slotta, J.D. (2016). *Collecting and Creating Visual Representations Within a Technology-Mediated Astronomy Curriculum*. Paper Presentation at the annual meeting of the American Educational Research Association, April 8-12, Washington, DC.

• 2015 •

- Slotta, J.D., Fong, C.F., & Quintana, R. (2015). *Common Knowledge: Supporting Teacher-led Discourse in a Knowledge Community*. Paper Presentation at the biennial meeting of the European Association for Learning and Instruction, August 25-29, Limassol, Cyprus.
- Slotta, J.D., Quintana, R. & Moher (2015). *A Distributed Technology Environment for Supporting a Community of Science Learners*. Paper Presentation at the biennial meeting of the European Association for Learning and Instruction, August 25-29, Limassol, Cyprus.
- *Fong, C. & Slotta, J.D. (2015). *The 3R Orchestration Cycle: Fostering Inquiry Discourse in a CSCL Classroom*. Paper presented to the Eleventh Computer-Supported Collaborative Learning Conference June 7-11. Gothenburg, Sweden.
- *Fong, C., Cober, R., Messina, R., Murray, J., Peebles, B. & Slotta, J.D. (2015). *The 3R Orchestration Cycle: Fostering MultiModal Inquiry Discourse in a Scaffolded Inquiry Environment*. Paper presented to the Eleventh Computer-Supported Collaborative Learning Conference, June 7-11. Gothenburg, Sweden.
- *Cober, R., Moher, T., & Slotta, J.D. (2015). Use of Visual Evidence for Planning and Argumentation. In *Knowledge Construction in the Instrumented Classroom: Supporting Student Investigations of Their Physical Learning Environment*. Paper presented to the Eleventh Computer-Supported Collaborative Learning Conference, June 7-11. Gothenburg, Sweden.
- *Cober, R., Acosta, A., Moher, T., Kuhn, A., Quintana, C., & Slotta, J.D. (2015). *The Use of Visual Evidence for Planning and Argumentation*. Paper presented to the Eleventh Computer-Supported Collaborative Learning Conference, June 7-11. Gothenburg, Sweden.
- *Gil, E. & Slotta, J.D. (2015). *Knowledge Community and Inquiry about Big Data among High School Students with Interactive Orchestrated Learning Space*. Poster presented to the Eleventh Computer-Supported Collaborative Learning Conference, June 7-11. Gothenburg, Sweden.
- *Zimmerman, T., Najafi, H., Slotta, J.D., Acosta, A., O'Hara, M., & Krauss, A. (2015). *Pioneer Valley Citizen Science Collaboratory: A CSCL Approach to Designing Citizen Science Projects*. Poster presented to the Eleventh Computer-Supported Collaborative Learning Conference, June 7-11. Gothenburg, Sweden.
- *Cai, H. (2015), Gu, X., & Slotta, J.D. (2015). *Orchestrating Visualization Tools for Supporting Collaborative Problem Solving in the Classroom: A Case Study*. Poster presented to the Eleventh Computer-Supported Collaborative Learning Conference, June 7-11. Gothenburg, Sweden
- Cober, R., Moher, T. & Slotta, J.D. (2015). *Working as a Scientific Community: Collecting and Sharing Evidence From Camera Trap Photos of Our Schoolyard*. Paper Presentation at the annual meeting of the American Educational Research Association, April 16-20, Chicago, IL.
- Tissenbaum, M. & Slotta, J.D. (2015). *The Role of a Technology Framework in Orchestrating Real-Time Inquiry: SAIL Smart Space (S3)*. Paper Presentation at the annual meeting of the American Educational Research Association, April 16-20, Chicago, IL.
- Lui, M. & Slotta, J.D. (2015). *Assessing the Role of Embodied Interaction in Mediating Collective Inquiry in Mixed-Reality Learning Environments*. Paper Presentation at the annual meeting of the American Educational Research Association, April 16-20, Chicago, IL.
- Fong, C., Cober, R., Messina, R., Moher, T., Murray, J., Peebles, B. & Slotta, J.D. (2015). *Common Knowledge: Iterative Design, Scripting, and Orchestration of Inquiry Discourse in Elementary*

Science. Paper Presentation at the annual meeting of the American Educational Research Association, April 16-20, Chicago, IL.

Cober, R., Slotta, J.D., Tan, E., So, H., Konings, K. (2015). Conditions That Support Teachers as Participatory Designers: Two Case Studies of Technology Design for Knowledge-Building Environments. Paper Presentation at the annual meeting of the American Educational Research Association, April 16-20, Chicago, IL.

• 2014 •

*Acosta, A., Lui, M., & Slotta, J.D. (2014). *Exploring Group-Level Epistemic Cognitions within a Knowledge Community and Inquiry Curriculum for Secondary Science*. Paper presented to the Eleventh International Conference of the Learning Sciences, June 23-27. Boulder, CO.

*Tissenbaum, M. & Slotta, J.D. (2014). *Developing an Orchestrational Framework for Collective Inquiry in Smart Classrooms: SAIL Smart Space (S3)*. Paper presented to the Eleventh International Conference of the Learning Sciences, June 23-27. Boulder, CO.

*Lui, M. & Slotta, J.D. (2014). *Collective Immersive Simulations: A New Approach to Learning and Instruction of Complex Biology Topics*. Paper presented to the Eleventh International Conference of the Learning Sciences, June 23-27. Boulder, CO.

*Voogt, J., McKenney, S., Kali, Y., Breuleux, A., Cober, R., Slotta, J.D., Eylon, B.S., Itow, R., Könings, K., Laferrière, T., Linn, M.C., Markauskaite, L., Reeve, R., Sagy, O., So, H.J., Svihla, V., Tan, E., Matuk, C. (2014). *Teachers as designers*. Invited presentation to the Eleventh International Conference of the Learning Sciences, June 23-27. Boulder, CO.

*Moher, T., Ching., C.C., Schaefer, S., Lee, V.R., Enyedy, N., Danich, J.A., Guerra, P., Gnoli, G., Pazmino, P.J., López Silva, B.A., Lyons, L., Perritano, A., Slattery, B., Tissenbaum, M., Slotta, J.D., Cober, R., Fong, C., Rubin, A. (2014). *Becoming reflective: Designing for reflection on physical performances*. Symposium session in the Eleventh International Conference of the Learning Sciences, June 23-27. Boulder, CO.

*Lui, M., Kuhn, A., Acosta, A., Quintana, C., & Slotta, J. D. (2014). *Supporting learners in collecting and exploring data from immersive simulations in collective inquiry*. Paper presented to the Eleventh International Conference of the Learning Sciences, June 23-27. Boulder, CO.

Slotta J., McCann, C., Resch, G., Andrew, D., Inglis, R., Kromberg, H., Makiwane, G.N., Chan, J., & Butler, L.M. (2014). *Supporting conceptual change for community healthworkers: The role of discourse and educational media during household visits*. Ninth International Conference on Conceptual Change. August 26-29, Bologna, Italy.

Lui, M. Nino-Soto, M. & Slotta, J.D. (2014). *Teaching Evolution With Collective Immersive Simulations*. Paper Presentation at the annual meeting of the American Educational Research Association, April 3- 7, Philadelphia, PA.

Tissenbaum, M. & Slotta, J.D. (2014). *A Smart Classroom Infrastructure for the Orchestration of Collaborative Inquiry*. Round Table Presentation at the annual meeting of the American Educational Research Association, April 3- 7, Philadelphia, PA.

Fong, C., Cober, R., Moher, T., Messina, R., Murray, J., Peebles, B. & Slotta, J.D. (2014). *Common Knowledge: Design, Scripting, and Orchestration of Knowledge Building Discourse in Elementary Science*. Paper Presentation at the annual meeting of the American Educational Research Association, April 3- 7, Philadelphia, PA.

- Slotta, J.D., Tissenbaum, M. & Lui, M. (2014). *Location, Location: Using the Physical Space of the Classroom for Pedagogical Advantage*. Paper Presentation at the annual meeting of the American Educational Research Association, April 3- 7, Philadelphia, PA.
- Zhao, N. & Slotta, J.D. (2014). *Measuring Teachers' Background Knowledge for the Study of Teachers' Role in Knowledge Community and Inquiry*. Paper Presentation at the annual meeting of the American Educational Research Association, April 3- 7, Philadelphia, PA.
- Najafi, H. & Slotta, J.D. (2014). *Students Co-constructing Knowledge in an Augmented Wiki Space: A Climate Change Collaborative Inquiry Activity*. Paper Presentation at the annual meeting of the American Educational Research Association April 3- 7, Philadelphia, PA.
- Cober, R., Fong, C., Peebles, B., Acosta, A. & Slotta, J.D. (2014). *Getting a Feel for It: A Hands-On Approach for Expressive Activities in Middle School Astronomy*. Round Table Presentation at the annual meeting of the American Educational Research Association, April 3- 7, Philadelphia, PA.

• 2013 •

- Korsager, M., Jorde, D. & Slotta, J. (2013). Global climate exchange - Students' science learning in a global classroom. Paper presented at ESERA 2-7 September 2013; Nicosia, Cyprus.
- Slotta, J.D. & Cober, R. (2013). *Smart Classrooms for Knowledge Communities: Scaffolding Complex Inquiry Designs*. Paper presented to the biennial conference of the European Association for Learning and Instruction (EARLI). August 26 – 31. Munich, Germany.
- Slotta, J.D. (2013). *Knowledge Community and Inquiry: Scaffolding individual, collaborative, and collective activities*. Paper presented to the biennial conference of the European Association for Learning and Instruction (EARLI). Smart Classrooms for Knowledge Communities: Scaffolding Complex Inquiry Designs August 26 – 31. Munich, Germany.
- *Najafi, H. & Slotta, J.D. (2013). *Multiple Scaffolds to Promote Collective Knowledge Construction in Science Classrooms*. Poster presented to the Tenth Annual Conference Computer Supported Collaborative Learning. June 16-19. Madison, WI.
- *Zhao, N. & Slotta, J.D. (2013). *Understanding the Teacher's Role in a Knowledge Community and Inquiry Curriculum*. Paper presented to the Tenth Annual Conference Computer Supported Collaborative Learning. June 16-19. Madison, WI.
- *Strijbos, J., Fischer, F., Cress, U., Looi, C. Puntambekar, S., Reimann, P., Rosé, C.P., & Slotta, J.D. (2013). *From Research Instruments to Classroom Assessments: A Call for Tools to Assist Teacher Assessment of Collaborative Learning*. Panel presentation to the Tenth Annual Conference Computer Supported Collaborative Learning. June 16-19. Madison, WI.
- *Tissenbaum, M. & Slotta, J.D. (2013). *Scripting and orchestration of collaborative inquiry: An increasing complexity of designs*. Paper presented to the Tenth Annual Conference Computer Supported Collaborative Learning. June 16-19. Madison, WI.
- *Najafi, H. & Slotta, J.D. (2013). *Common Knowledge: Orchestrating Synchronously Blended F2F Discourse in the Elementary Classroom*. Paper presented to the Tenth Annual Conference Computer Supported Collaborative Learning. June 16-19. Madison, WI.
- *Fong, C., Cober, R., Madeira, C., Messina, R., Murray, J., Peebles, B. & Slotta, J.D. (2013). *Common Knowledge: Orchestrating Synchronously Blended F2F Discourse in the Elementary Classroom*. Paper presented to the Tenth Annual Conference Computer Supported Collaborative Learning. June 16-19. Madison, WI.

- *Slotta, J.D. (2013). *Knowledge Community and Inquiry (KCI) – A New Pedagogical Model for Collective Inquiry*. Paper presented in Symposium: Scripting and Orchestration: Recent Theoretical Advances (Fischer, F., Slotta, J.D., Tchounikine, P., Kollar, I., Wecker, C., Stegmann, C., & Chinn, C.) to the Tenth Annual Conference Computer Supported Collaborative Learning. June 16-19. Madison, WI.
- *Cober, R., McCann, C., Moher, T., & Slotta, J.D. (2013). *Aggregating Students' Observations in Support of Community Knowledge and Discourse*. Paper presented to the Tenth Annual Conference Computer Supported Collaborative Learning. June 16-19. Madison, WI.
- *Lui, M. & Slotta, J.D. (2013). *Exploring Evolutionary Concepts with Immersive Simulations*. Paper presented to the Tenth Annual Conference Computer Supported Collaborative Learning. Madison, WI. June 16-19.
- Cober, R., McCann, C., Moher, T. & Slotta, J.D. (2013). *Aggregate Representations to Support Scientific Inquiry: A Case Study With Embedded Phenomena*. Paper Presentation at the annual meeting of the American Educational Research Association (AERA), April 27- May 1, San Francisco, CA.
- Fong, C. & Slotta, J.D. (2013). *Collective Inquiry Discussions in a Knowledge Community Curriculum*. Paper Presentation at the annual meeting of the American Educational Research Association (AERA). April 27- May 1, San Francisco, CA.
- Fong, C., Cober, R., Madeira, C. & Slotta, J.D. (2013). *Common Knowledge for Collective Inquiry Discourse*. Poster Presentation at the annual meeting of the American Educational Research Association (AERA). April 27- May 1, San Francisco, CA.
- Najafi, H. & Slotta, J.D. (2013). *How Can We Design Technology Scaffolds to Foster Characteristics of Knowledge Communities in Science School Classrooms?* Poster Presentation at the annual meeting of the American Educational Research Association (AERA). April 27- May 1, San Francisco, CA.
- Slotta, J.D., Najafi, H., Zhao, N. & Tissenbaum, M. (2013). *Knowledge Community and Inquiry: A New Model for Secondary Science*. Paper Presentation at the annual meeting of the American Educational Research Association (AERA). April 27- May 1, San Francisco, CA.
- Tissenbaum, M. & Slotta, J.D. (2013). *Researching Smart Classrooms: Defining Technology Elements for Orchestration of Complex Inquiry Activities*. Poster Presentation at the annual meeting of the American Educational Research Association (AERA), April 27- May 1, San Francisco, CA.
- Slotta, J.D., Tuisenbaum, M., Lui, M., & Zukowski, M. (2013). *Smart Classrooms for Knowledge Communities: EPIC (Embedded Phenomena for Inquiry Communities) Technology Environment*. Paper Presentation at the annual meeting of the American Educational Research Association (AERA). April 27- May 1, San Francisco, CA.
- Cober, R., McCann, C., Moher, T., & Slotta, J.D. (2013). *Structured Multivocal Representations in Collaborative Inquiry: Scaffolding the Construction of Relationship Networks From Binary Observations*. Paper Presentation at the annual meeting of the American Educational Research Association (AERA). April 27- May 1, San Francisco, CA.
- Zhao, N. & Slotta, J.D. (2013). *Teacher-Student Interactions in a KCI (Knowledge Community and Inquiry) Curriculum*. Paper Presentation at the annual meeting of the American Educational Research Association, April 27- May 1, San Francisco, CA.

• 2012 •

- *Smordal, O., Slotta, J.D., & Krange, I. (2012) *Science Hub: A digital medium for supporting collective science inquiry*. Paper presented to the Tenth International Conference of the Learning Sciences. Sydney, Australia.
- *Lui, M. & Slotta, J.D. (2012). *Designing Immersive Environments for Collective Inquiry*. Paper presented to the Tenth International Conference of the Learning Sciences. July 2-6. Sydney, Australia
- *Slotta, J.D., Tissenbaum, M., Lui, M., & Zukowski, M. (2012). *Smart Classrooms for Knowledge Communities: EPIC Technology Environment*. Paper presented to the Tenth International Conference of the Learning Sciences. July 2-6. Sydney, Australia.
- *Cober, R., McCann, C., Slotta, J.D. & Moher, T. (2012). *Materials that scaffold collective inquiry: The role of aggregate representations*. Paper presented to the Tenth International Conference of the Learning Sciences. July 2-6. Sydney, Australia.
- *Fong, C., Pascual-Leone, R. & Slotta, J.D. (2012). *The Role of Discussion in Orchestrating Inquiry*. Paper presented to the Tenth International Conference of the Learning Sciences. July 2-6. Sydney, Australia.
- *Tissenbaum, M. & Slotta, J.D. (2012). *Scripting Collective Inquiry in High School Physics*. Paper presented to the Tenth International Conference of the Learning Sciences. July 2-6. Sydney, Australia
- *Madeira, C.A. & J.D. Slotta (2012). *Teacher Paradigm Shifts for 21st practice Skills: The Role of Scaffolded Reflection Within A Peer Community*. Paper presented to the Tenth International Conference of the Learning Sciences. July 2 – 6. Sydney, Australia.
- *Madeira, C.A. & J.D. Slotta (2012). *Iterative Design Enhances Inquiry-Based Teaching*. Poster presented to the Tenth International Conference of the Learning Sciences. July 2 – 6. Sydney, Australia
- *Madeira, C.A., Gnoli, A. & Messina, R. Moher, T. & Slotta, J.D. (2012). *Fostering an 'Adaptive Nature' for Teacher Practice: Technology Supports in a Co-Design Community*. Paper Presentation at the annual meeting of the American Educational Research Association, April 12-14. Vancouver, Canada.
- Madeira, C.A., & Slotta, J.D. (2012). *Planning and Enactment of Project-Based Science Lessons: The Impact of Collaboration and Reflection*. Paper Presentation at the annual meeting of the American Educational Research Association, April 12-14. Vancouver, Canada.
- Cober, R. & Slotta, J.D. (2012). *Using aggregated representations of student-contributed content in an inquiry-based science curriculum: A case study*. Paper presented at the annual meeting of the Canadian Society for Studies in Education. May 25, Waterloo, ON.
- Lui, M., Nino-Soto, M., & Slotta, J.D. (2012). *An Immersive Simulation for Evolutionary Biology: Advancing Knowledge Community Through Shared Experiences in Collective Inquiry*. Paper Presentation at the annual meeting of the American Educational Research Association, April 12-14. Vancouver, Canada.
- Slotta, J.D., & Moher, T. (2012). *Mashing Up Simulations and Knowledge Construction Technologies to Support Complex Instructional Designs*. Paper Presentation at the annual meeting of the American Educational Research Association, April 12-14. Vancouver, Canada.

Fong, C., Cober, R. Madeira, C., & Slotta, J. D. (2012). *Common Knowledge: Scaffolding Collective Inquiry for Knowledge Communities*. Paper Presentation at the annual meeting of the American Educational Research Association, April 12-14. Vancouver, Canada.

Tissenbaum, M., Lui, M., & Slotta, J. D. (2012). *Smart Classrooms for Knowledge Communities: Learning Across Contexts in Secondary Science*. Paper Presentation at the annual meeting of the American Educational Research Association, April 12-14. Vancouver, Canada.

Tissenbaum, M., Lui, M., & Slotta, J.D. (2012). *A Technology Framework for Smart Classrooms and Knowledge Communities*. A Framework to Understand the Impact of Technology on Collaborative Learning. Paper Presentation at the annual meeting of the American Educational Research Association, April 12-14. Vancouver, Canada.

• 2011 •

Korsager, M., Jorde, D. & Slotta, J. (2011). *From Local to Global Understanding of Climate Change: students' ecological understanding*. Paper presented at European Science Education Research Association Conference, September 4-9. Lyon, France

*Lui, M., Tissenbaum, M., & Slotta, J. D. (2011). *Scripting collaborative learning in smart classrooms: Towards building knowledge communities*. Paper presented at the 9th International Conference on Computer-Supported Collaborative Learning (CSCL). July 4-11. Hong Kong, China.

*Slotta, J.D., Tissenbaum, M. & Lui, M. (2011). *SAIL Smart Space: Orchestrating Collective Inquiry for Knowledge Communities*. Paper presented at the 9th International Conference on Computer-Supported Collaborative Learning (CSCL). July 4-11. Hong Kong, China.

*Madeira, C. & Slotta, J.D. (2011). *Technology-mediated reflection and peer-exchange: Supports for teacher professional development communities*. Paper presented at the 9th International Conference on Computer-Supported Collaborative Learning (CSCL). July 4-11. Hong Kong, China.

*Najafi., H., Zhao, N. & Slotta, J.D. (2011). *Facilitating Knowledge Communities in Science Classrooms through Scripted Collaboration*. Paper presented at the 9th International Conference on Computer-Supported Collaborative Learning (CSCL). July 4-11. Hong Kong, China.

*Zhao, N., Najafi, H. & Slotta, J.D. (2011). *An Analysis of Teacher-Students Interactions in Three Science Classes: A Pilot Study*. Paper presented at the 9th International Conference on Computer-Supported Collaborative Learning (CSCL). July 4-11. Hong Kong, China.

*Madeira, C. & Slotta, J.D. (2011). *Visual Representations of Videotaped Interactions: Understanding Activity Patterns in the Classroom*. Paper presented at the 9th International Conference on Computer-Supported Collaborative Learning (CSCL). July 4-11. Hong Kong, China.

*Zhao, J., Li, K. Chai, S., Wang, L., Guo, S., Yu, S., Cheng, G., Yang, X., Li, Y., Xu, H., Chen, X., Gu, X., Bao, X., Li, K., Slotta, J. (2011). *Introducing China: Expanding the CSCL Research Community*. Paper presented at the 9th International Conference on Computer-Supported Collaborative Learning (CSCL). July 4-11. Hong Kong, China.

*Charles, E., Tissenbaum, M., Whittaker, C., Lui, M., Dugdale, M. & Slotta, J.D. (2011). *Co-design of Collaborative Collective Knowledge Environment*. Paper presented at the 9th International Conference on Computer-Supported Collaborative Learning (CSCL). July 4-11. Hong Kong, China.

*Slotta, J.D., Tissenbaum, M., Lui, M., Alagha, I., Burd, E., Higgins, S., Mercier, E., Fischer, F., Pilz, F., Kollar, I., Moher, T., Gnoli A., Jaeger, A., Wiley, J., López Silva, B., Evans, M., Motto, A., Brunger, A., Crider, Wilkins, J. (2011). *Embedded Phenomena for Knowledge Communities: Supporting complex practices and interactions within a community of inquiry in the elementary science classroom*.

Symposium session at the 9th International Conference on Computer-Supported Collaborative Learning (CSCL). July 4-11. Hong Kong, China.

*Tissenbaum, M., Lui, M., & Slotta, J.D. (2011). *Orchestrating Collaborative Science Curriculum Across Formal and Informal Contexts*. Paper presented at the 9th International Conference on Computer-Supported Collaborative Learning (CSCL). July 4-11. Hong Kong, China.

*Wang, H., Slotta, J.D., Zhao, N., Tissenbaum, M., Håklev, S. (2011). How the Creation of Open Educational Resources Can Impact the Creators: The Inspiration of the Studies of Learning Science in the West for the Studies of Educational Technology in China. Paper presented at the 9th International Conference on Computer-Supported Collaborative Learning (CSCL). July 4-11. Hong Kong, China.

Slotta, J.D., Peters, V.L. & Najafi, H. (2011). A Knowledge Community and Inquiry model for Secondary Science. Paper presented in Symposium: New Learning Environments for Science: Their Implications for Research and Affordances for Supporting Science Inquiry. The American Educational Research Association (AERA). April 8-12. New Orleans, Louisiana.

Slotta, J.D., Tissenbaum, M. & Lui, M (2011). *Researching the classroom of the future: Frameworks and formalisms*. Paper presented in Symposium: Designing Technology to Support Collaboration in the Classroom. The American Educational Research Association (AERA). April 8-12. New Orleans, Louisiana.

Moher, T., Gnoli, A. & Slotta, J.D. (2011). *Embedded Phenomena: Rethinking Technology Support for Complex Collaborative Activity Structures in Classrooms*. Paper presented in Symposium: New Learning Environments for Science: Their Implications for Research and Affordances for Supporting Science Inquiry. The American Educational Research Association (AERA). April 8-12. New Orleans, Louisiana.

Lui, M., Tissenbaum, M. & Slotta, J.D. (2011). *Helping Students Solve Physics Problems Conceptually: The Impact of Collaborative Tagging in a Smart Classroom Environment*. Round Table presentation to the session: Enhancing Science Content Achievement, Knowledge Organization, and Problem Solving at the annual meeting of the American Educational Research Association (AERA). April 8-12. New Orleans, LA.

Madeira, C. & Slotta, J. D. (2011). *Fostering of Inquiry Teaching Practices: The Role of Reflections and Peer Exchange*. Poster presented at the annual meeting of the American Educational Research Association (AERA). April 8-12. New Orleans, LA.

Fong, C. & Slotta, J. D. (2011). *Supporting Teachers in the Adoption of Inquiry and Technology Methods: Research to Practice*. Poster presented at the annual meeting of the American Educational Research Association (AERA). April 8-12. New Orleans, LA.

Zhao, N., Najafi, H. & Slotta, J. D. (2011). *A Configurable Technology Environment to Support Knowledge, Community, and Inquiry in Secondary Science*. Poster presented at the annual meeting of the American Educational Research Association (AERA). April 8-12. New Orleans, LA.

Peters, V. L., & Slotta, J. D. (2011). *Co-constructing knowledge artifacts for understanding the physiology of human system diseases*. Paper presented to the National Association for Research in Science Teaching (NARST), April 3-6, Orlando, FL.

Tissenbaum, M., Lui, M., & Slotta, J.D. (2011). *Co-designing Collaborative Smart Classroom Curriculum for Secondary Science*. Paper presented at the Rethinking Education in the Knowledge Society Conference. March 7-9. Monte Verita, Switzerland.

• 2010 •

*Peters, V. L., & Slotta, J. D. (2010). *Analyzing collaborative knowledge construction in secondary school biology*. Paper presented to the 9th International Conference of the Learning Sciences (ICLS). June 29 – July 2. Chicago IL.

*Peters, V. L., & Slotta, J. D. (2010). *Content analysis of collaboratively constructed knowledge artifacts: Issues and opportunities for research*. Paper presented to the 9th International Conference of the Learning Sciences (ICLS). June 29 – July 2. Chicago IL.

Charles, E., Slotta, J. D., Tissenbaum, M. & Lui, M. (2010). *Co-designing physics activities for smart classrooms*. Paper presented at the annual meeting of the Canadian Society for Studies in Education. May 29 – June 1. Montreal, Quebec, Canada.

Slotta, J.D., Madeira, C., Peters, V. L., Najafi, H., & Zhao, N. (2010). *Supporting Knowledge Communities in Secondary Science*. Paper presented at the annual meeting of the Canadian Society for Studies in Education. May 29 – June 1. Montreal, Quebec, Canada.

Yang, D., Santiago, A., Streveler, R. A., Miller, R. L., Slotta, J. D., & Chi, M. T. H. (2010). *Repairing student misconceptions using ontology training: A study with advanced engineering students*. Paper accepted for presentation at the American Society for Engineering Education (ASEE), Louisville, KY.

Peters, V. L., & Slotta, J. D. (2010). *Using content analysis to study peer assessment in a wiki-based science curriculum*. In B. De Wever (Chair), Comparing approaches to content analysis in computer-supported collaborative learning environments. Symposium conducted at the annual meeting of the American Educational Research Association (AERA). April 30 – May 4. Denver, CO.

Peters, V. L., & Slotta, J. D. (2010). *Visualizing collaborative knowledge construction in a wiki-based science curriculum*. Poster session presented at the annual meeting of the American Educational Research Association (AERA). April 30 – May 4. Denver, CO.

Madeira, C. & Slotta, J. D. (2010). *Teacher Knowledge Deeply Bound in the Context of Practice: Using an Activity-Theoretical Perspective*. Paper presented at the annual meeting of the American Educational Research Association, April 30 – May 4. Denver, Colorado.

Madeira, C. & Slotta, J. D. (2010). *Designing a Teacher Community for Curriculum Planning, Enactment, and Reflection*. Paper presented at the annual meeting of the American Educational Research Association, April 30 – May 4. Denver, Colorado.

Najafi, H. & Slotta, J. D. (2010). *Scaffolding Symmetric Participation in Collaborative Inquiry: A Knowledge Community Approach*. Paper presented at the annual meeting of the American Educational Research Association, April 30 – May 4. Denver, Colorado.

Lui, M., Tissenbaum, M. & Slotta, J. D. (2010). *Helping Students Make Mathematics Connections: Collaborative Visualizations in Smart Classrooms*. Paper presented at the annual meeting of the American Educational Research Association, April 30 – May 4. Denver, Colorado.

Madhok, J., Slotta, J. D., & Linn, M. C. (2010). *Longitudinal Impact of an Eighth-Grade Inquiry Curriculum on Students' Beliefs and Achievement in Science*. Paper presented at the annual meeting of the American Educational Research Association, April 30 – May 4. Denver, Colorado.

• 2009 •

Slotta, J.D. and Najafi, H. (2009). *Visual representations of a knowledge community: A new role for concept maps*. Paper presented at the biennial meeting of the European Science Education Research Association (ESERA). Sept. 1-4. Istanbul, Turkey.

- Slotta, J.D., Najafi, H., & Peters, V. L. (2009). *Fostering a Knowledge Community in Secondary Science: A Blended Model of Collaborative Knowledge Construction and Scripted Inquiry*. Paper presented at the 13th Biennial Conference for the European Association for Research on Learning and Instruction (EARLI). Aug 25-29. Amsterdam, the Netherlands.
- Peters, V. L., & Slotta, J. D. (2009). *Co-designing a collaborative curriculum for secondary school biology*. Paper presented at the 13th Biennial Conference for the European Association for Research on Learning and Instruction (EARLI). Aug 25-29. Amsterdam, the Netherlands.
- Slotta, J.D. (2009). *A forum for international peer exchange: Consequences and conversations*. Paper presented at the 13th Biennial Conference for the European Association for Research on Learning and Instruction (EARLI). Aug 25-29. Amsterdam, the Netherlands.
- *Slotta, J.D. and Aleahmad, T. (2009). *Toward a technology community for the learning sciences*. Panel presented at the Eighth International Conference on Computer Supported Collaborative Learning (CSCL). June 10-12. Rhodes, Greece.
- *Slotta, J.D. & Linn. M.C. (2009). *Designing effective collaborative inquiry: New technology frameworks*. Paper presented at the Eighth International Conference on Computer Supported Collaborative Learning (CSCL). June 10-12. Rhodes, Greece.
- *Tissenbaum, M. & Slotta, J.D. (2009). *A new framework for smart classroom research: Co-designing curriculum, research and technology*. Poster presented at the Eighth International Conference on Computer Supported Collaborative Learning (CSCL). June 10-12. Rhodes, Greece.
- *Peters, V. L., & Slotta, J. D. (2009). *Co-designing curricula to promote collaborative knowledge construction in secondary school science*. Paper presented at the Eighth International Conference on Computer Supported Collaborative Learning (CSCL). June 10-12. Rhodes, Greece.
- *Najafi, H., & Slotta, J. D. (2009). *Sustaining collaborative knowledge construction in graduate-level education: Examining design issues*. Paper presented at the Eighth International Conference on Computer Supported Collaborative Learning (CSCL). June 10-12. Rhodes, Greece.
- *Madeira, C., & Slotta, J. D. (2009). *Designing On-line Communities to Enhance Teacher Professional Development*. Poster presented at the biennial conference on Computer Supported Collaborative Learning (CSCL). June 10-12. Rhodes, Greece.
- Tissenbaum, M. and Slotta, J.D. (2009). *Co-designing curriculum for smart classrooms*. Paper presented at the annual meeting of the Canadian Society for Studies in Education. May 25-27. Ottawa, Ontario, Canada.
- Slotta, J.D. (2009). *Integrating technologies – for deep learning*. Paper presented at the annual meeting of the Canadian Society for Studies in Education. May 25-27. Ottawa, Ontario, Canada.
- Najafi, H., Slotta, J. D. (2009). *Researching a Knowledge Community Approach for Secondary Science Classrooms*. Paper presented at the annual meeting of the Canadian Society for Studies in Education. May 25-27. Ottawa, Canada.
- Peters, V. L., & Slotta, J. D. (2009). *A knowledge community model for collaborative inquiry science curriculum*. Paper presented at the annual meeting of the Canadian Society for Studies in Education. May 25-27. Ottawa, Canada.
- Madeira, C & Slotta,, J.D. (2009). *The Role of Reflection and Peer Exchange in the Development of Pedagogical Content Knowledge*. Paper presented at the annual meeting of the Canadian Society for Studies in Education. May 25-27. Ottawa, Canada.

- White, R. E., Cooper, K., Hughes, R. N. & Slotta, J. (2009). DIVER (Digital Interactive Video Exploration and Reflection): A New Technological Application for the Annotation of Video Data across Disciplines. Fifth International Congress of Qualitative Inquiry. University of Illinois. May 20-23. Urbana-Champaign, Illinois.
- Madeira, C.A. & Slotta, J.D. (2009). *A Distributed Knowledge Community for Science Teachers: The Impact of Peer Exchange and Reflection Tools*. Paper presentation at the Annual Meeting of the National Association for Research in Science Teaching. Orange County, California.
- Madeira, C.A. & Slotta, J.D. (2009). *The Development of PCK in Science Teachers: Classroom Enactment as a Prompt for Reflection*. Poster presented to the Annual Meeting of the National Association for Research for Science Teaching. Orange County, California.
- Slotta, J. D., & Peters, V. L. (2009, April). *A rich framework for knowledge communities in secondary science*. Paper presented to the Annual Meeting of the American Educational Research Association. April 13-17, San Diego, CA.
- Forbes, C.T., Madeira, C.A. Davis, E.A. & Slotta, J.D. (2009). *Activity-Theoretical Research on Science Teachers' Learning: Challenges and Opportunities*. Paper presentation at the Annual Meeting of the American Educational Research Association. April 13-17, San Diego, CA.
- Najafi, H., Slotta, J. D. & Gelb, D. (2009). *Opportunities and Challenges for Persistent Knowledge Construction in a Wiki-Supported Interdisciplinary Seminar*. Poster presented at the annual meeting of the American Educational Research Association (AERA). April 13-17, San Diego, CA
- Peters, V. L., & Slotta, J. D. (2009). *Scripting a Collaborative Curriculum for High School Biology: A Co-Design Approach*. Paper presented at the annual meeting of the American Educational Research Association (AERA). April 13-17, San Diego, CA

• 2008 •

- Najafi, H., Slotta, J. D. & Gelb, D. (2008, August). *Promoting knowledge building in graduate-level education: Opportunities and pitfalls*. Paper presented at the IKIT Summer Institute, Toronto, ON.
- *Peters, V., & Slotta, J. D. (2008). *Building wiki-based pedagogical scripts for knowledge communities*. Paper presented at the Seventh International Conference International Conference of the Learning Sciences. June 23-27. Utrecht, The Netherlands.
- *Slotta, J.D. and Peters, V. (2008). *A Blended Model for Knowledge Communities: Embedding Scaffolded Inquiry*. Paper presented at the Seventh International Conference of the International Conference of the Learning Sciences (ICLS). June 23-27. Utrecht, The Netherlands.
- Peters, V., & Slotta, J.D. (2008). *Co-designing wiki-based scripts for secondary school biology*. Paper presented at the annual meeting of the Canadian Society for Studies in Education. May 31 – June 3. Vancouver, BC.
- Najafi, H., Slotta, J., Gelb, D. (2008). *Understanding the relationships between curriculum planning decisions, patterns of activity, and learning outcomes: An analysis of the evolution of a course community*. Paper presented at the annual meeting of the Canadian Society for the Study of Education. May 31 – June 3. Vancouver, BC.
- Peters, V., & Slotta, J. D. (2008). *Connecting Knowledge Building With Scripted Activities in a Secondary School Biology Classroom: A Case Study*. Paper presented at the annual meeting of the American Educational Research Association, New York, NY.
- Najafi, H., Slotta, J. D. (2008). *Examining the Growth Trajectory of a Wiki-Based Knowledge Community*. Paper presented at the Dean's Graduate Student Research Conference. Toronto, ON.

• 2007 •

Slotta, J.D. (2007). *Learning in the 21st Century: New Opportunities for Knowledge Communities*. Presentation to the IBM CASCON Conference. December 10. Toronto, Canada.

Slotta, J.D. (2007). *How we test our theoretical models: Media dependencies and empirical paradigms*. Paper presented at the biennial meeting of the European Association for Research on Learning and Instruction (EARLI). August 28 – September 1. Budapest, Hungary.

Peters, V. and Slotta, J.D. (2007). Connecting knowledge building with scripted activities in a secondary school biology classroom: A case study. Paper presented at the IKIT summer institute. August 10. Toronto.

*Slotta, J.D. (2007). *Supporting collaborative inquiry: New architectures, new opportunities*. Paper presented at Seventh International Conference on Computer Supported Collaborative Learning (CSCL) conference. July 1-3. Rutgers, NJ.

*Kollar, I., Wecker, C., Fischer, F., Kohnle, C., Slotta, J.D. (2007). Are core objectives of Web-based collaborative inquiry learning already core learning prerequisites? The case of argumentation competences and computer literacy. Paper presented at Seventh International Conference on Computer Supported Collaborative Learning (CSCL) conference, Rutgers, NJ.

Slotta, J.D. Jorde, D. (2007). *New opportunities for international exchanges: A Review, and next steps*. Paper presented at the Annual Meeting of the American Educational Research Association. Chicago, IL.

Zimmerman, T.D. & Slotta, J.D. (2007). *Connecting science to real world issues: A knowledge integration approach*. Paper presentation at the Annual Meeting of the American Educational Research Association. Chicago, IL.

• 2006 •

Slotta, J.D. and Zimmerman, T. (2006). *Supporting student inquiry projects in science: new architectures and new opportunities*. Paper presented at Howard Hughes Foundation meeting: "To Think and Act Like a Scientist. Feb 10-11, 2006. Lubbock, Texas.

Slotta, J.D. (2006). A New Open Source Technology Architecture for Collaborative Inquiry. Paper presented at the Annual Meeting of the American Educational Research Association. April 9-14. San Francisco

Kollar, I., Fischer, F., & Slotta, J.D. (2006). Web-Based Inquiry Learning: How Internal and External Scripts Influence Collaborative Argumentation and Individual Learning Outcomes. Paper presented at the Annual Meeting of the American Educational Research Association. April 9-14. San Francisco

*Gobert, J., Horwitz, P., Tinker, B., and Slotta, J.D. (2006). *Authoring, Assessment & Open Source: Implications for Research and Classroom Application*. Interactive workshop and panel presentation at the Sixth International Conference of the Learning Sciences (ICLS). June 27 – July 1. Bloomington.

• 2005 •

Slotta, J.D. (2005). *Technology-enhanced collaborations: new opportunities for curriculum and research*. Paper presented at semi-annual meeting of the European Science Education Research Association. Aug. 28 – Sept. 1. Barcelona, Spain.

Slotta, J.D. (2005). *Applying a conceptual change model in technology-enhanced instruction*. Paper presented at the European Association for Research in Learning and Instruction (EARLI). Aug. 23-26. Nicosia, Cyprus.

Slotta, J.D. (2005). *Scaffolding Interactive Learning: The Case for a Rich Interoperability Framework*. Structured Session presented to the Annual Meeting of the American Educational Research Association. April 11-15. Montreal, Canada.

Slotta, J.D. (2005). *Next generation technologies for peer collaboration and exchange*. Paper presented at the annual Winter Text conference. January 21-24. Jackson, WY.

Kollar, I., Fischer, F., and Slotta, J.D. (2005). *Internal and External Collaboration Scripts in Web-based Science Learning*. Paper presented to the Sixth International Conference on Computer Supported Collaborative Learning (CSCL) June 8-13. Taipei.

• 2004 •

Slotta, J.D. (2004). *Technology-enhanced Learning in Science: promoting research partnerships in a Web-based platform*. Paper presented at the annual Winter Text conference. January 16-19, Jackson, WY.

Kollar, I., Kobbe, L., Fischer, F., Slotta, J.D., and Koschwitz, H. (2004). Analysis and facilitation of scientific argumentation – The interaction of internal and external cooperation scripts in Web-based inquiry learning. Paper presented to the annual meeting of the National Association for Research in Science Teaching (NARST). Mar. 31-Apr. 4. Vancouver, Canada.

Slotta, J.D., Jorde, D. & Erlien, W. (2004). International collaborations in a Web-based inquiry science environment: Promoting cross-cultural research and collaborative curriculum. Paper presented to the annual meeting of the National Association for Research in Science Teaching (NARST). Mar. 31-Apr. 4. Vancouver, Canada.

Renninger, A., Schlager, M., Slotta, J.D., Hanson, K., Sumner, T., Nair, S., Recker, M., and Shumar, W. (2004). *Why do they come? And, what do they want? Toward a framework for studying online participation*. Structured Session presented to the Annual Meeting of the American Educational Research Association. April 12-16, San Diego, CA.

Slotta, J. D. and Zimmerman, T. (2004). *Integrating Handheld activities into Web-based inquiry projects*. Paper presented to the Annual Meeting of the American Educational Research Association. April 12-16. San Diego, CA.

Slotta, J. (2004). *Integrating visualizations into geoscience curriculum and assessments*. Paper presented to NAGT Cutting Edge Workshop: Visualizations in the Geosciences. Annual Meeting of the American Geophysics Union. Dec. 12, 2004. San Francisco, CA

• 2003 •

Slotta, J.D. (2003). Content analysis of verbal data from Web-based curriculum projects: Implications for cognitive and educational research. Paper presented to the annual Winter Text conference. January 22-25, Jackson, WY.

Gobert, J., Slotta, J.D., and Pallant, A. (2003). *Students' collaborative model-building and peer critique on-line*. Paper presented to the annual meeting of the National Association for Research in Science Teaching (NARST). March 22-25. Philadelphia, PA.

Slotta, J. D. (2003). *Partnerships in The Web-based Inquiry Science Environment*. Symposium presented to the annual meeting of the National Association for Research in Science Teaching (NARST). March 22-25. Philadelphia, PA. *war canceled session.

- Slotta, J.D. Linn, M.C., Jorde, D., Mork, S., Fischer, F., Kollar, I., Meister, D., Decker, R. (2003). International collaborations in a Web-based Inquiry Science Environment: Promoting cross cultural research and collaborative Curriculum. Poster presented to the Fifth International Conference on Computer Supported Collaborative Learning (CSCL). June 14-18. Bergen, Norway.
- Slotta, J.D., Linn, M.C., Jorde, D., Mork, S., Shirousu, H., Fischer, F. & Kollar, I. (2003). International collaborations in a Web-based Inquiry Science Environment: Promoting cross cultural research and collaborative curriculum. Interactive session presented to the Fifth International Conference Computer Supported Collaborative Learning (CSCL). June 14-18. Bergen, Norway.
- Slotta, J.D., Kerber, A. and Duffy, L. (2003). *Gypsy Moths, WISE and the Minnesota State Department of Natural Resources: Supporting Curriculum Partnerships*. Paper presented at the National Science Teachers Association Meeting. October 28-30. Minneapolis, MN.

• 2002 •

- Slotta, J.D., Clark, D.B., Cheng, B. (2002). *Integrating Palm Hand-held Technology into the Web-based Inquiry Science Environment (WISE)*. Short paper presented at the annual meeting of Computer Supported Collaborative Learning (CSCL). January 1-7. Boulder, CO
- Slotta, J.D. and Zimmerman, T. (2002). *Using Handheld technology to support innovative curriculum in the Monterey Bay Aquarium*. Poster presented at the annual meeting of Center for Innovative Learning Technologies (CILT). Feb 23-25, 2002. Portland, OR.
- Gobert, J. Slotta, J. & Pallant, A., Nagy, S. & Targum, E. (2002). *A WISE Inquiry Project for Students' East-West Coast Collaboration*, Presented at the Annual Meeting of the American Educational Research Association, New Orleans, LO, April 1-5
- Cuthbert, A. & Slotta, J.D. (2002). *Design Studies: Enabling rapid cycles of trial and refinement using the WISE design principles WISE Online Communities*. Poster presented to the Annual Meeting of the American Educational Research Association. April 1-6, 2002. New Orleans, LA.
- Slotta, J.D. & Jorde, D. (2002). *How American and Norwegian Teachers Customized the WISE Learning Environment to Improve its Value and Validity*. Paper presented to the Annual Meeting of the American Educational Research Association. April 1-6, 2002. New Orleans, LA.
- Jorde, D., Slotta, J.D. & Mork, S. (2002). *Implementing a Web-Based Curriculum in Science Classrooms: A Comparative Study of Teachers in Norway and the US*. Paper presented to the annual meeting of the National Association for Research in Science Teaching (NARST). April 7-10. New Orleans, LA.
- Scheepens, R. & Slotta, J.D. (2002). *Why WISE? Helping Physics Teachers to Use The Internet in a Different Way*. Paper presented to the annual meeting of the National Association for Research in Science Teaching (NARST). April 7-10. New Orleans, LA.
- Slotta, J.D. (2002). *How WISE accommodates diverse teaching practices: Not so brittle that it breaks*. Paper presented to the annual meeting of the National Association for Research in Science Teaching (NARST). April 7-10. New Orleans, LA.
- Gobert, J. & Slotta, J.D. (2002). *Inquiry Learning through Students' East-West Coast Collaboration*. Paper presented to the annual meeting of the National Association for Research in Science Teaching (NARST). April 7-10. New Orleans, LA.
- Slotta, J.D., & Cheng, B. (2002). *Integrating Palms into WISE: The Web-based Inquiry Science Environment*. Paper presented to the Annual Meeting of the National Educational Computing Conference (NECC). June 12-14. San Antonio, TX.

- Aleahmad, T. and Slotta J.D. (2002). *Integrating Handheld Technology and Web-based Science Activities*. Paper presented at ED-MEDIA. June 24-29. Denver, CO.
- Linn, M.C., Baumgartner, E. and Slotta, J.D. (2002). Contrasting Models for the Customization of Curriculum. Part of special session: Is Reform Portable? A Consideration of Issues and Strategies Related to Creating Sustainable and Scalable Innovations (N. Sabelli, organizer). Fourth International of the Learning Sciences (ICLS). Oct. 23-26. Seattle, WA.
- Gobert, J., Slotta, J.D., and Pallant, A. (2002). *Collaborative Model-building and Revision Over the Wire*. Poster presented at the Fourth International Conference of the Learning Sciences (ICLS). Oct. 23-26, 2002. Seattle, WA.
- Slotta, J.D. (2002). *WISE Scaling: Customization and mentoring in a 3rd Generation Learning Technology*. Paper presented to the Fourth International Conference of the Learning Sciences (ICLS). Oct. 23-26, 2002. Seattle, WA.

• 2001 •

- Slotta, J.D. (2001). *The Web-based Inquiry Science Environment: Technology for partnerships and inquiry curriculum*. Paper presented at the annual meeting of the American Association for the Advancement of Science (AAAS). February 12. San Francisco, CA.
- Slotta, J.D. (2001). *Wolves and Frogs in your curriculum: Integrating WISE inquiry and technology for Minnesota teachers*. Workshop presented to the Annual Meeting of the Minnesota and Wisconsin Science Teachers Association. March 15, 2001. Duluth, MN.
- Slotta, J.D and Cuthbert, A. (2001). *WISE Online Communities: Design Features and Critical Features*. Paper presented at the annual meeting of the American Educational Research Association. April 10-14. Seattle, WA.
- Slotta, J.D. & Linn, M.C. (2001). *WISE Professional Development: Researching Adoption of Inquiry and Technology*. Paper presented at the annual meeting of the American Educational Research Association. April 10-14. Seattle, WA.

• 2000 •

- Slotta, J.D., Kerber, A.K., Cuthbert, A. and Stromme, A. (2000). *How can wolf control controversies help students using the Web-based Integrated Science Environment (WISE)*. Paper presented at the "Wolf 2000" International Symposium Feb 12-14. Duluth, MN.
- Monaghan, J., Slotta, J.D., Levey, B., and Cuthbert, A. (2000). Professional development through immersion in a dynamic on-line community: Using the Web-based Integrated Science Environment (WISE). Annual Meeting of the AECT. Feb 16-20. Long beach, CA.
- Cheng, B.H., Linn, M.C., and Slotta, J.D., (2000). *Changing Culture of Assessment: Designing Curriculum that Connects to Students' Epistemological Beliefs*. Paper presented at the Annual Meeting of the American Educational Research Association, April 14-18, New Orleans, LA.
- Baumgartner, E., Cheng, B., Seethaler, S., Lo, E., and Slotta, J.D. (2000). *The Design of Flexibly Adaptive Tools for Understanding Water Quality*. Paper presented at the Annual Meeting of the American Educational Research Association, April 14-18, New Orleans, LA.
- Cuthbert, A., Clark, D.B., Slotta, J.D., and Jorde, D. (2000). *Helping Students Elicit Self-Explanation and Clarification From One Another Through Personalized Electronic Discussions*. Paper presented at the Annual Meeting of the American Educational Research Association, April 14-18, New Orleans, LA.

- Slotta, J.D. (2000). *Developing a SCOPE Curriculum Sequence: Web-Based Activities for a Controversy Curriculum*. Paper presented at the Annual Meeting of the American Educational Research Association, April 14-18, New Orleans, LA.
- Baumgartner, E., Cheng, B., Seethaler, S., and Slotta, J.D (2000). *Strawberry Creek: A case of iterative curriculum design*. Paper presented at the National Association for Research in Science Teaching (NARST) annual meeting. April 28 - May 1,. New Orleans, LA.
- Jorde, D., Slotta, J.D., and Stromme, A. (2000). *An international comparison of an internet curriculum*. Paper presented at the National Association for Research in Science Teaching (NARST) annual meeting. April 28 - May 1,. New Orleans, LA.
- Stromme, A., Jorde, D., and Slotta, J.D. (2000). *The Web-based Integrated Science Environment: A partnership between the University of California, Berkeley ad Oslo, Norway*. Paper presented at the National Association for Research in Science Teaching (NARST) annual meeting. April 28 - May 1, New Orleans, LA.
- Slotta, J.D. (2000). *A WISE Model for Professional Development*. Paper presented at the National Association for Research in Science Teaching (NARST) annual meeting. April 28- May1. Boston, MA.
- Slotta, J.D. and Linn, M.C. (2000). *Designing WISE Assessments that accommodate teacher customizations*. Presentation to the Workshop of the Center for Innovative Learning Technologies (CILT). Oct. 27, 2000. Washington, DC.

• 1999 •

- Galili, I., Slotta, J.D., and Linn, M.C. (1999). *A New Pattern to Teach Science Based on Research on Students' Knowledge and Computer Environment*. National Association for Research in Science Teaching (NARST) annual meeting. March 28-31. Boston, MA.
- Slotta, J.D., Dodson, K., and Marantz, J. (1999). *Making Use of Existing Web Resources: A Partnership Between KIE and the NASA Life Sciences Data Archive*. National Association for Research in Science Teaching (NARST) annual meeting. March 28-31. Boston, MA.
- Russell, J. and Slotta, J.D. (1999). *The Scientist Who Went Back to School: A Case Study of Partnership in Curriculum Development*. National Association for Research in Science Teaching (NARST) annual meeting. March 28-31. Boston, MA.
- Monaghan, J., Slotta, J.D., and Cuthbert, A. (1999). *A Professional Development Model for Effective Internet Use: The Web-Based Integrated Science Environment (WISE)*. National Association for Research in Science Teaching (NARST) annual meeting. March 28-31. Boston, MA.
- Slotta, J.D., Cheng, B., and Linn, M.C. (1999). *Designing Effective Integrated Science Curriculum: Toward a Theoretical Framework*. Paper presented at the Annual Meeting of the American Educational Research Association, April 19-23; Montreal, Quebec, Canada.
- Slotta, J.D., Dodson, K., and Marantz, J. (1999). *Rats in Space: A Curriculum Partnership Between NASA Life Sciences, a High School Life Sciences Teacher, and the Knowledge Integration Environment Project*. Paper presented at the Annual Meeting of the American Educational Research Association, April 19-23; Montreal, Quebec, Canada.
- Oliver, K.M. and Slotta, J.D. (1999). *The Utility of Computer Tools to Support Students' Scientific Problem Solving*. Paper presented at the Annual Meeting of the American Educational Research Association, April 19-23; Montreal, Quebec, Canada.

- Slotta, J.D. and Linn, M.C. (1999). *Helping Students Use the Internet Effectively in Science Activities: The Knowledge Integration Environment*. Paper presented at the Annual Meeting of the American Educational Research Association, April 19-23; Montreal, Quebec, Canada.
- Linn, M.C., Bell, P., Shear, L., and Slotta, J.D. (1999). *Internet Science Partnerships: Can Rats and Deformed Frogs Help Students Learn?* Paper presented at the Annual Meeting of the American Educational Research Association, April 19-23; Montreal, Quebec, Canada.
- Chi, M.T.H., Siler, S., Ferrari, M., and Slotta, J.D. (1999). *Why Students Fail to Learn Concepts of Complexity*. Paper presented at the Annual Meeting of the American Educational Research Association, April 19-23; Montreal, Quebec, Canada.
- Cuthbert, A., Slotta, J.D., and Linn, M.C.L. (1999). *Emergent structures for conversations and communities*. Presentation to the annual workshop of the NSF Center for Innovative Learning Technologies, April 30 - May 2; San Jose, CA.
- Slotta, J.D., Jorde, D., and Stromme, A. (1999). *Scaffolding Students' Use of Visualizations in a Web-based Curriculum*. Presentation to the annual workshop of the NSF Center for Innovative Learning Technologies, April 30 - May 2; San Jose, CA.
- Slotta, J.D., Cuthbert, A., and Linn, M.C. (1999). *Designing WISE Curriculum: How On-line Communities support the WISE-NASA Partnership*. Presentation to the annual workshop of the NSF Center for Innovative Learning Technologies, April 30 - May 2; San Jose, CA.
- Slotta, J. D. (1999). *A knowledge integration approach to professional development: Enabling teachers to succeed in adopting new practices*. Paper presented in a panel at Ed Media 1999 entitled, Design of Web-based Learning Environments: Integrating curriculum, technology, and professional development approaches.
- Morrow, J. and Slotta, J.D. (1999). *Hi Tech solutions for Low Tech classrooms*. Paper presented in a panel at Ed Media 1999 entitled, Design of Web-based Learning Environments: Integrating curriculum, technology, and professional development approaches. Seattle, WA.
- Stromme, A., Jorde, D., & Slotta, J. D. (1999). *Web-Based Integrated Science Environment (WISE) - Building bridges between American research and the Norwegian National Science Curriculum*. Annual meeting of the International Organization of Science and Technology Education. June 26 - July 2. Durban, South Africa.
- Jorde, D. & Slotta, J.D. (1999): *Web-Based Integrated Science Environment: building bridges between American research and the Norwegian National Science Curriculum*. Presented at European Science Education Research Association (ESERA) Kiel, Germany.
- Slotta, J.D. and Morrow, J. (1999). *The Web-based Integrated Science Environment (WISE): Connecting to the World*. Presentation to the Annual Meeting of the American Association for Computers in Education, WebNet 99. October 27 - November 2. Honolulu, HI.

• 1998 •

- Slotta, J. D. (1998). *The Knowledge Integration Environment: Scaffolding Critical Questions in the Science Classroom*. Paper presented at the annual meeting of the American Educational Research Association. San Diego, CA.
- Slotta, J. D. Dodson, K., and Marantz, J. (1998). *Connecting school science with real science through Internet Resources: Partnerships in the Knowledge Integration Environment*. Paper presented at the Annual Meeting of the National Association for Research in Science Teaching, April 19. San Diego, CA.

- Cuthbert, A., Chiao, Y., Estrada, C. Goff, M., Martin, B., Shah, S., & Slotta, S. (1998). *Interactive Concurrent Design Environments: The Mars 2012 Pilot Study NASA Conference on Manned Missions to Mars*. May 4. Houston, TX
- Gordin, D., Slotta, J. D., and Zaritsky, R. (1998). *Science Visualizations to Learner Visualizations: Determining the Design Principles for Transformation*. Tenth annual IEEE SuperComputing Conference. Nov. 8-12. Orlando, Florida.
- Slotta, J. D., Cotter, D, and Gordin, D. (1998) *Leading Edge Technologies for Teachers*. Tenth annual IEEE SuperComputing Conference. Nov. 8-12. Orlando, Florida

• 1988 - 1997 •

- Clark, D. B. and Slotta, J. D. (1997). *Interpreting Evidence on the Internet: Sex, Lies, and Multimedia*. Paper presented at the annual meeting of the American Educational Research Association. March 24-28. Chicago, IL
- Slotta, J. D. and Chi, M. T. H. (1997). *Instruction for Conceptual Change: The Success Story of Ontology Training*. Paper presented at the annual meeting of the American Educational Research Association. March 24-28. Chicago, IL
- Slotta, J. D. & Cuthbert, A. (1997). *Applying a framework of conceptual change in the science classroom: Studies of knowledge integration*. Proceedings of the annual meeting of the Cognitive Science Society. August 7-10. Stanford, CA.
- Slotta, J. D. and Chi, M. T. H. (1996). Understanding constraint-based processes: a precursor to conceptual change in physics. Paper presented at the Eighteenth Annual Cognitive Science Society Conference. July 12-17. San Diego, CA.
- Slotta, J. D., Chi, M. T. H., & Joram, E. (1992). *An Underlying Materialistic Commitment in Naïve Thought: Preliminary findings in support of ontological classification*. Paper presented at the annual meeting of the American Educational Research Association, April 13-17. San Francisco.
- Slotta, J. D. (1992). *The structure of naïve physics knowledge: Preliminary support of ontological categories*. Paper presented at the annual University of Pittsburgh, Carnegie Mellon Graduate Student Conference.
- Zelaznik, H. N., Slotta, J. D., & Rosenbaum, D. A. (1989). The timing of negative acceleration: A new theory for the linear speed accuracy trade-off in aimed hand movements. Paper presented at the Annual Meeting of the North American Society for the Psychology of Sport and Physical Activity. June 2-4. Kent, OH,
- Slotta, J. D., Rosenbaum, D. A., & Vaughan, J. (1989). *The utilization of energetics in movement planning*. Paper presented at the Annual Meeting of the North American Society for the Psychology of Sport and Physical Activity. June 2-4. Kent, OH,
- Rosenbaum, D. A., Vaughan, J., Marchak, F., Barnes, H. J., Slotta, J. D., & Jorgensen, M. J. (1988). *Grammar of action: I. Selecting grip patterns*. Paper presented at the Annual Meeting of the Psychonomic Society. November 10-12. Chicago, IL,
- Vaughan, J., Rosenbaum, D. A., Slotta, J. D., Barnes, H. J., Marchak, F., & Jorgensen, M. J. (1988). *Grammar of action: II. Selecting coordinative patterns of the arm, hand, and finger*. Paper presented at the Annual Meeting of the Psychonomic Society. Nov. 10-12. Chicago, IL,

Teaching

Education:	<i>Introduction to Computers in Education</i> CTL 1602 (Winter, 2019)	University of Toronto
	<i>Technology, Curriculum and Instruction</i> OISE/UT 5574H (Nine times: 2005-2015)	University of Toronto
	<i>Knowledge, Media and Learning</i> CTL1926. (Eight times: 2008-2016)	University of Toronto
	EDUC9737 Spring 2018	Boston College
	<i>Technology for Elementary Educators</i> DTE 391A. Fall, 2003, Fall, 2004	University of California, Berkeley
	<i>Integrating Technology in Elementary Science</i> DTE 391B. Spring, 2004, 2005	University of California, Berkeley
	<i>Technology, Curriculum and Instruction</i> EDUC 295. Fall, 2002, 2003, 2004.	University of California, Berkeley
	<i>Conceptual Change in Science Education</i> Fall, 1996, Fall, 2000 (with M. Linn).	University of California, Berkeley
Media Design:	<i>Tangible and Embodied Interactions for Learning</i> KMD 1002. Winter, 2014	University of Toronto
	<i>Knowledge, Media and Learning</i> KMD2003. Fall, 2006, 2007, 2008,	University of Toronto
	<i>Knowledge Communities: Contexts and Practices</i> KMD1002. Summer, 2010	University of Toronto
	<i>Sustainability and Appropriate Design</i> CE 98/E198. (Engineering) Spring, 2004	University of California, Berkeley
	<i>Mars by 2012 - Interdisciplinary Studies</i> Spring, 1998 (with L. Kuznetz),	University of California, Berkeley
Psychology:	<i>Cognitive Psychology Research Methods</i> Spring, 1993, 1994, 1995	University of Pittsburgh
Physics:	Teaching Assistant/Tutor – classical and modern 1985 - 1987	Case Institute of Technology

Service Activities

Program Leadership and Development

Program designer: Design for Learning. Masters of Education at Boston College	2017 - 2018
Graduate Program Coordinator, Curriculum Studies and Teacher Development Ontario Institute for Studies in Education, University of Toronto	2012 – 2015
Director, Collaborative Program in Knowledge Media Design Knowledge Media Design Institute, University of Toronto	2007 – 2010
Associate Director, Knowledge Media Design Institute University of Toronto	2008 – 2010

Editorial Review:

Editor, topic issue: Active Learning. <i>Frontiers in Science</i> .	2017 - present
Editorial board: <i>International Journal of Smart Technology and Learning</i>	2015 – present

Section Editor, Encyclopedia of Science Education (R. Gunstone, Ed.)	2012 – 2014
Editorial Review Board. Journal of Research in Science Teaching.	2010 – 2013
Editorial Review Board. Journal of the Learning Sciences	2004 – present
Editorial Review Board, International Journal of Science Education (IJSE)	2002 – 2008
Editorial Review Board Journal of Educational Psychology,	2007 – 2010.
Journal of Research in Science Teaching	Occasional papers
Cognition and Instruction	Occasional papers

Service to Scholarly Field

Scientific Committee, EARLI SIG 20 & 26, Jerusalem, Israel	2017 – 2018
Program Committee, EARLI SIG 20 & 26, Ghent, Belgium	2015 – 2016
Program Committee STEM2016 Conference, Beijing, China	2016
Board member. International Society of the Learning Sciences.	2015 – present
Chair of Technology Committee. International Society of the Learning Sciences.	2015 – present
Program Committee: mLearn 2011, Beijing, China	2010 – 2011
Organizing committee, Interactive Designs for Children conference	2011
Organizer, China-Canada Joint conference on Education and Technology	2010
Scientific advisory committee Conference of the Learning Sciences	2010
Organizing Committee, NSF Cutting Edge in Geoscience Education	2010
Organizing committee, Computer Supported Collaborative Learning	2009
Section Chair (Division C, Learning; Section C, Science) AERA	2008
Organizing committee, International Conference of the Learning Sciences	2008
Grant proposal reviews for SSHRC review panels for faculty grants (Insight) and individual proposals by request.	2008—present.
Grant proposal reviews for NSF review panels within the EHR division, as well as individual proposals by request.	1999—present.

Advisory Boards and Executive Committees

Advisor and Evaluator, NSF-funded STEM+C project awarded to Professor Dhazi Yang, Boise State University	2016 – present
Advisory Board, Beijing Advanced Innovation Center for Future Education,	2016 – present
Continuous Learning and Automated Scoring in Science; NSF Cyberlearning project awarded to Marcia Linn, University of California, Berkeley. Advisor	2011 – present
VISUAL Project; NSF DRK-12 Project awarded to Marcia Linn. Advisor University of California, Berkeley.	2010 – present
The Facilitation Project; NSF ITEST grant to Dr. Kirsten Ellenbogen. Advisor. Science Museum of Minnesota.	2010 – present.
ASSISTments for Science; NSF DRK12 grant to Janice Gobert. advisory board	2007 – present.
Science Education Resource Center, Northfield, MN; Cathy Manduca, PI; Advisor	2002 – 2008.
Knowledge Media Design Institute, University of Toronto. Executive Committee,	2006 – 2010.
Project Open Source Open Access; KMDI; Univ. of Toronto; committee member	2005 – 2010.

KMDI CONCERT Academic Working Group, University of Toronto,	2006 – 2009.
Collaborative Reasoning DOE Grant; Richard Anderson, PI; advisory board	2003 – 2006.
NIH: Frontiers of Physiology; Marsha Matyas, PI; advisory board	2001 – 2005.
NSF: Making Thinking Visible; Janice Gobert, PI; advisory board,	2001 – 2005.
Educational Connections, Inc; board Chair	1999 – 2005.

Research and Technology Communities

Founded Educoder, a network of technology designers and developers in the learning sciences, funded by two SSHRC-CCSIP grant, and several other small pools of funding.

Developed Scalable Architecture for Interactive Learning (SAIL) an open source framework that will support development and exchange of learning technologies across the field.

Founded ENCORE, the Educational Network and Community for Open Resource Exchange, a wiki-based community for the sharing and support of open source and open content resources.

Developed the Web-based Inquiry Science Environment (WISE) at University of California at Berkeley, which currently supports an international community of research and development.

Professional Affiliations:

International Society of the Learning Sciences (ISLS).

American Educational Research Association (AERA)

European Association for Research in Learning and Instruction (EARLI)