# CURRICULUM VITAE Matthew J. Koehler, Ph.D.

Professor College of Education Michigan State University 509 Erickson Hall East Lansing, MI 48824 Fón: 517.353.9287 Email: mkoehler@msu.edu Fax: 517.353.6393

Web: mkoehler.educ.msu.edu

**Short Biography -** I graduated from the University of Wisconsin in 1999, with a Ph.D. in Educational Psychology, with an emphasis in Cognitive Psychology applied to Education. I have prior degrees in Computer Science (M.S. and B.S.) and Mathematics (B.S.). All of this has led me to the study of educational technology, where my interests have led me, broadly speaking, to seek to understand the pedagogical affordances of newer technologies for learning.

Research Interests - In my research, I seek to understand the pedagogical affordances (and constraints) of newer technologies for learning, specifically in the context of the professional development of teachers, and in the design of technology-rich and innovated learning environments for adults and children. By examining the learning afforded by recent technologies, I have focused on how these technologies might be well-suited to help learners (especially teachers) acquire new knowledge, skills, and understanding. My work in understanding the affordances of technology for teaching and teachers' professional development has led to a program of research about a form of knowledge, Technological Pedagogical Content Knowledge (TPACK), that has developed theoretical, pedagogical, and methodological perspectives that characterize teachers who effectively integrate content, pedagogy, and technology in their classroom practice.

## **EDUCATION**

1999	<b>Ph.D Educational Psychology</b> :: University of Wisconsin - Madison. <i>Emphasis Area</i> : Cognitive Psychology Applied to Education. <i>Outside Minor</i> : Cognitive Psychology. <i>Advisor</i> : Dr. Richard Lehrer. <i>Dissertation Topic</i> : Designing case-based hypermedia tools to help teachers understand children's mathematical development
1991	MS - Computer Science :: University of Wisconsin - Madison
1989	BS - Mathematics :: University of Wisconsin - Madison
1989	BS - Computer Science :: University of Wisconsin - Madison

# **PROFESSIONAL EXPERIENCE**

2012	_	present	<b>Professor</b> :: Educational Psychology & Educational Technology College of Education:: Michigan State University
2006	-	2012	<b>Associate Professor</b> :: :: Educational Psychology & Educational Technology ::: College of Education:: Michigan State University
2000	-	2006	<b>Assistant Professor</b> :: Learning Technology and Culture :: Department of Counseling Psychology, Educational Psychology, and Special Education :: Michigan State University
1998	-	1999	<b>Lecturer</b> :: Department of Educational Psychology :: University of Wisconsin - Madison
1997	-	1999	<b>Teaching Assistant</b> :: Cognition and Instruction I & II (doctoral courses) :: Department of Educational Psychology :: University of Wisconsin - Madison
1996	-	1999	Research Assistant :: Modeling Nature Project & Modeling in Mathematics and Science Projects :: Wisconsin Center for Education Research :: University of Wisconsin - Madison
1994	-	1996	<b>Research Assistant</b> :: Cognitively Guided Instruction of Geometry Project :: Wisconsin Center for Education Research :: University of Wisconsin - Madison
1992	-	1994	<b>Research Assistant</b> :: Cognitively Guided Instruction Project :: Wisconsin Center for Education Research :: University of Wisconsin - Madison
1992	_	1992	<b>Software Engineer</b> :: Insight Industries :: Platteville, WI
1991	-	1992	Network Engineer :: AT&T Bell Laboratories :: Naperville, IL
1990	-	1991	<b>Teaching Assistant</b> :: Advanced Operating Systems (doctoral courses) :: Department of Computer Science :: University of Wisconsin - Madison
1989	-	1990	<b>Distinguished University Fellow</b> :: Department of Computer Science :: University of Wisconsin - Madison
1989	_	1989	Software Engineer :: Unisys Coperation:: Roseville, MN
1988	_	1988	<b>Computer Consultant</b> :: Wisconsin Student Association :: University of Wisconsin - Madison

## **FUNDED RESEARCH**

(2007 – 2009) Research and Evaluation of the Design-based Engineering Curriculum :: MSU Intramural Research Grant : \$60,000 : PI: Buch, CO-PIs: Koehler, Mishra.

(2004-2009) Problem Based Learning Project for Teachers :: National Science Foundation Grant :: \$4,143,024 :: PI: Eberhardt CO-PIs: Koehler, Lundeberg, Parker.

(2004 – 2007) Professional Development in Early Grade Reading:: U.S. Department of Education Grant:: \$1,418,091:: PI – Powell (Purdue), CO-PI: Diamond (Purdue), PI (MSU, CO-PI on main grant): Koehler.

(2003-2005) Enriching the Learning of Teacher Education Students with Technology-Enhanced, Video-Rich Cases Studies of Classrooms :: Joe & Lucy Byers Foundation Grant :: \$60.000 :: PI – Koehler.

(2003-2007) Teachers as Designers A Problem-Based Approach to Preparing Teachers :: U.S. Department of Education :: \$1,837,313 :: PI: Zhao CO-PIs: Mishra, Koehler, Urban-Lurain, Rosaen.

(2000-2003) Communities Of Designers: A Comprehensive Project-Based Approach To Preparing Tomorrow's Teachers To Use Technology :: U.S. Department of Education :: Grant #: P342A000193. \$ 1,419,552 :: PI: Zhao CO-PI: Mishra.

(2002-2003) Design of Case-Based Tools :: OERI/NCISLA – Subcontract to Michigan State University. \$70,000 :: PI – Koehler.

(2001-2002) Case-Based Tools for Professional Development :: OERI/NCISLA – Subcontract to Michigan State University. \$60,000 :: PI – Koehler.

(2000-2001) Design of Growth and Diversity :: OERI/NCISLA – Subcontract to Michigan State University. \$48,770 (Amt of support for Koehler) :: PI – Anderson.(2000-2001) Digital Video Cases in Education :: U.S. Department of Education Subcontract to MSU. \$10,333 (Amt of support for Koehler) :: PI Spiro.

# **TEACHING AND ADVISING**

#### **Awards**

2013 – MSU AT&T Instructional Technology Award. Honorable Mention for Fully Online Course.

2008 -MSU-AT&T Instructional Technology Award: Best fully online course.

## **Past and Present Doctoral Students**

Andrea Zellner Chris Sloan Aman Yadav

Mete Akcaoglu Naiyi Xie Fincham Michael Phillips

Spencer Greenhalgh Alicia Trotman Sean Kotke

Josh Rosenberg Tianyi Zhang-Ulyshen Fei Gao

Eric Dickens

# **Undergraduate Courses Taught**

CEP 416 - Technology and Education

TE150 - Reflections on Learning

# **Masters Courses Taught**

CEP 800 - Psychology of Learning in School and Other Settings

CEP 801 – Psychological Development: Learner Differences and Communalities

CEP 806 – Learning Science with Technology

CEP 807 - Proseminar in Educational Technology

CEP 813 - Electronic Portfolios for Teaching and Learning

CEP 817 – Learning Technology By Design

ED870 - Capstone Seminar

CEP 882 - Special Topics in Educational Technology

## **Doctoral Courses Taught**

CEP 900 - Proseminar in Educational Psychology and Educational Technology

CEP 901 - Proseminar in Educational Technology

CEP 909 - Cognition and Technology

CEP 914 – Learning Science with Technology: Theoretical Perspectives

CEP 930 - Educational Inquiry

CEP 955 – Research Design

CEP 996 – Mind, Media, and Learning

CEP 990 – Independent Study

## **PUBLICATIONS**

## **Articles in Peer-reviewed Journals**

- Koehler, M. J., Zellner, A. L., Roseth, C. J., Dickson, R. K., Dickson, P. Bell, J. (2013). Introducing the first hybrid doctoral program in educational technology. *TechTrends*, *57*(3), 47-53. DOI: 10.1007/s11528-013-0662-0
- McConnell, T. J., Parker, J. M., Eberhardt, J., Koehler, M. J., & Lundeberg, M. A. (2013). Virtual professional learning communities: Teachers' perceptions of virtual versus face-to-face professional development. *Journal of Science Education and Technology*, 22(3), 267-277.
- **DeSchryver, M. D., Leahy, S. M., Koehler, M. J., & Wolf, L. G. (2013).** The habits of mind necessary to generate new ways of teaching in a career of constant change. *TechTrends, 57*(3), 41. DOI: 10.1007/s11528-013-0661-1
- **Kereluik, K., Mishra, P., & Koehler, M. J. (2011, Winter)**. On learning to subvert signs: Literacy, technology and the TPACK framework. *The California Reader, 44*(2), 12-18.
- Yadav, A., Phillips, M., Lundeberg, M. A., Koehler, M. J., Clouse, K., & Dirkin, K. H. (2011). If a picture is worth a thousand words is video worth a million? Differences in affective and cognitive processing of video and text cases. *Journal of Computing in Higher Education*, 23(1), 15-37. DOI 10.1007/s12528-011-9042-y.
- **Mishra, P., Koehler, M.J., & Henriksen, D. (2011)**. The seven trans-disciplinary habits of mind: Extending the tpack framework towards 21st century learning. *Educational Technology,* 11(2), 22-28.
- **Zhang, M., Lundeberg, M.A., Koehler, M.J., & Eberhardt, J. (2011)**. Understanding affordances and challenges of three types of video for teacher professional development. *Teaching and Teacher Education, 27*(2), 454-462.
- **Zhang, M., Passalacqua S., Lundeberg M., Koehler, M. J., Eberhardt, J., Parker, J., Urban-Lurain, M., Zhang, T., and Paik, S. (2010).** "Science Talks" in kindergarten classrooms: Improving classroom practice through collaborative action research. *Journal of Science Teacher Education, 21*, 161-179. doi: 10.1007/s10972-009-9161-8.
- **Powell, D.R., Diamond, K.E., Burchinal, M.R., & Koehler, M.J. (2010)**. Effects of an early professional development intervention on head start teachers and children. *Journal of Educational Psychology, 102*(2), 299-312. doi: 10.1037/a0017763.

- **Zhang, M., Lundeberg, M., McConnell, T.J., Koehler, M.J. & Eberhardt, J. (2010).** Using questioning to facilitate discussion of science teaching problems in teacher professional development. *The Interdisciplinary Journal of Problem-based Learning, 4*(1), 57-82.
- **Powell, D.R., Diamond, K.E., & Koehler, M.J. (2010)**. Use of a case-based hypermedia resource in an early literacy coaching intervention with pre-kindergarten teachers. *Topics in Early Childhood Special Education, 29*(4), 239-249. doi: 10.1177/0271121409353610.
- Malik, Q., Koehler, M.J., Mishra, P., Buch, N., Shanblatt, M., & Pierce, S.J. (2010). Understanding student attitudes in a freshman design sequence. *International Journal of Engineering Education*, 26(5), 1179-1191.
- **Gao, F., Noh, J.M., & Koehler, M.J. (2009)**. Comparing role-playing activities in second Life and face-to-face environments. *Journal of Interactive Learning Research*, 12(4), 423-443.
- **Mishra, P. & Koehler. M. J. (2009)**. Too cool for school? No way! Using the TPACK framework: You can have your hot tools and teach with them, too. *Learning & Leading with Technology, 36*(7), 14-18.
- Harris, J., Mishra, P., & Koehler, M.J. (2009). Teachers' technological pedagogical content knowledge and learning activity types: Curriculum-based technology integration reframed. *Journal of Research on Technology in Education*, 41(4), 393-416.
- **Zhang, T., Koehler, M.J., & Spatariu, A. (2009)**. The development of the motivation for critical reasoning in online discussions inventory. *American Journal of Distance Education, 23*(4), 194-211. DOI:10.1080/08923640903294411
- **Mishra, P., Koehler, M. J., & Kereluik, K. (2009).** The song remains the same: Looking back to the future of educational technology. *TechTrends*, *53*(5), 48-53. DOI:10.1007/s11528-009-0325-3.
- **Koehler, M.J., & Mishra, P. (2009).** What Is technological pedagogical content knowledge? *Contemporary Issues in Technology and Teacher Education (CITE)*, *9*(1), 60-70.
- Schmidt, D. A., Baran, E., Thompson A. D., Koehler, M. J., Mishra, P. & Shin, T. (2009). Technological pedagogical content knowledge (tpack): The development and validation of an assessment instrument for preservice teachers. *Journal of Research on Technology in Education*, 42(2), 123-149.
- McConnell, T. J., Zhang, M., Koehler, M. J., Lundeberg, M. A., Urban-Lurain, M, Parker, J. M, and Eberhardt, J. (2008). A lesson in teaching, starring you. *Journal of Staff Development*, 29(4), 39-42.
- Weizman, A., Covitt, B.A., Koehler, M.J., Lundeberg, M.A., Oslund, J.A., Low, M.A, Eberhardt, J., Urban-Lurain, M. (2008). Measuring teachers' learning from a problem-based learning approach to professional development in science education. *Interdisciplinary Journal of Problem-based Learning*, *2*(2), 29-60. DOI: 10.7771/1541-5015.1081

- McConnell, T.J., Eberhardt, J., Parker, J., Stanaway, J., Lundeberg, M., Koehler, M.J., Urban-Lurain, M. & PBL Staff (2008). The PBL Project for Teachers: Using problem-based learning to guide K-12 science teachers' professional development. *MSTA Journal*, *53*(1), 16-21.
- McConnell, T. J., Stanaway, J. C., Eberhardt, J., Parker, J. M., Lundeberg, M. A., & Koehler, M. J. (2008). Building a better PBL problem: Lessons learned from the PBL project for teachers. *MSTA Journal*, *53*(1), 52-57.
- **Yadav, A., & Koehler, M.J. (2007).** The role of epistemological beliefs in preservice teachers' interpretation of video cases of early-grade literacy instruction. *Journal of Technology and Teacher Education*, *15*(3), 335-361.
- **Koehler, M.J., Mishra, P., & Yahya, K. (2007)**. Tracing the development of teacher knowledge in a design seminar: Integrating content, pedagogy, & technology. *Computers and Education,* 49(3), 740-762. DOI: 10.1016/j.compedu.2005.11.012
- **Mishra, P., & Koehler, M. J. (2006)**. Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record, 108*(6), 1017-1054. doi: 10.1111/j.1467-9620.2006.00684.x
- **Koehler, M.J. & Mishra, P. (2005).** What happens when teachers design educational technology? The development of technological pedagogical content knowledge. *Journal of Educational Computing Research*, 32(2), 131-152. DOI: 10.2190/0EW7-01WB-BKHL-QDYV
- **Koehler, M.J., & Mishra, P. (2005).** Teachers learning technology by design. *Journal of Computing in Teacher Education, 21*(3), 94-102
- **Koehler, M.J., Yadav, A., Phillips, M.M., & Cavazos-Kottke, S. (2005).** What is video good for? Examining how media and story genre interact. *Journal of Educational Multimedia and Hypermedia*, 14(3), 249-272.
- **Lima, M., Koehler, M.J., & Spiro, R.J. (2004)**. Cognitive flexibility hypertexts and the development of creative and critical thinking in business education: The Panteon project. *FACEF Pesquisa, 7*(3), 109-127.
- **Koehler, M.J., Mishra, P., Hershey, K., & Peruski, L. (2004).** With a little help from your students: A new model for faculty development and online course design. *Journal of Technology and Teacher Education, 12*(1), 25-55.
- **Lima, M., Koehler, M.J., & Spiro, R.J. (2004)**. Collaborative interactivity and integrated thinking in Brazilian business schools using cognitive flexibility hypertexts: The panteon project. *Journal of Educational Computing Research*, *31*(4), 371-406.
- **Koehler, M.J. (2002)**. Designing case-based hypermedia for developing understanding of children's mathematical reasoning. *Cognition and Instruction, 20*(2), 151-195. DOI: 10.1207/S1532690XCI2002\_2

- **Koehler, M. J., & Mishra, P. (2002)**. Art from randomness. How Inverso uses chance, to create haiku. *Interactive Multimedia Electronic Journal of Computer-Enhanced Learning, 4*(1).
- **Koehler, M.J., & Levin, J.R. (2000)**. RegRand: Statistical software for the multiple-baseline design. *Behavior Research Methods, Instruments, and Computers, 32*(2), 367-71. DOI: 10.3758/BF03207807
- **Koehler, M.J., & Lehrer, R. (1998).** Designing a hypermedia tool for learning about children's mathematical cognition. *Journal of Educational Computing Research, 18*(2), 123-145.
- **Koehler, M.J., & Levin, J. R. (1998)**. Regulated randomization: a potentially sharper analytical tool for the multiple-baseline design. *Psychological Methods, 3*(2), 206-217. DOI: 10.1037/1082-989X.3.2.206

#### **Books**

- **Koehler, M.J., & Mishra, P. (Eds.) (2011).** Proceedings of Society for Information Technology & Teacher Education International Conference 2011. Chesapeake, VA: AACE.
- **Mishra, P., Koehler, M.J., & Zhao, Y. (Eds.) (2007).** Faculty development by design: Integrating technology in higher education. Information Age Publishing, Greenwich, CT.

# **Book Chapters**

- **Koehler, M.J., Mishra, P., Akcoaglu, M., Rosenberg, J.M. (2013)**. Technological pedagogical content knowledge for teachers and teacher educators. In N. Bharati and S. Mishra (Eds.), *ICT integrated teacher education models* (pp. 1-8). New Delhi, India: Commonwealth Educational Media Center For Asia.
- **Koehler, M. J., Mishra, P., Kereluik, K., Shin, T. S., & Graham, C. R. (2014)**. The technological pedagogical content knowledge framework. In J.M. Specter, M.D. Merrill, J. Elen, & M.J. Bishop (Eds.), *Handbook of research on educational communications and technology* (pp. 101-111). Springer New York. DOI: DOI 10.1007/978-1-4614-3185-5\_9
- **Koehler, M. J., Shin, T. S., & Mishra, P. (2012)**. How do we measure TPACK? Let me count the ways. In R. N. Ronau, C. R. Rakes, & M. L. Niess (Eds.), *Educational technology, teacher knowledge, and classroom impact: A research handbook on frameworks and approaches* (pp. 16-31). Hershey, PA: IGI Global
- Mishra, P., Koehler, M.J., Zellner, A., & Kereluik, K. (2012). Thematic considerations in integrating TPACK into a graduate program. In D. Polly, C. Mims, & K. Persichitte (Eds.), *Creating technology-rich teacher education programs: Key issues* (pp. 1-12). Hershey, PA: IGI Global. DOI: 10.4018/978-1-4666-0014-0.ch001
- **Foster, A. N., Mishra, P., & Koehler, M. J. (2011)**. Digital game analysis: Using the technological pedagogical and content knowledge framework to determine the affordances of a game for

- learning. In M. S. Khine (Ed.), *Learning to play: exploring the future of education with video games* (pp. 189-212). New York: Peter Lang.
- **Koehler, M.J., & Mishra, P. (2008)**. Introducing tpck. AACTE Committee on Innovation and Technology (Ed.), *The handbook of technological pedagogical content knowledge (tpck) for educators* (pp. 3-29). Mahwah, NJ: Lawrence Erlbaum Associates.
- Wong, D., Mishra, P., Koehler, M.J., & Siebenthal, S. (2007). Teaching as filmmaking: On appreciating the aesthetics of educational experience. In M. Girod & J. Steed (Eds.), *Technology in the college classroom: Education*. Stillwater, OK: New Forums Press.
- **Petrosino, A. & Koehler, M.J. (2007).** Using anchor video to scaffold reflective practice in preservice mathematics, science and literacy teacher education. In R. Goldman, R. Pea, B. Barron, & S. Derry (Eds.), *Video research in the learning sciences* (pp. 411-423). Mahwah, NJ: Lawrence Erlbaum Associates.
- Mishra, P., Koehler, M.J., & Zhao, Y. (2007). Communities of designers: A Brief history and introduction. In P. Mishra, M.J. Koehler, & Y. Zhao (Eds.), Faculty development by design: Integrating technology in higher education (pp. 1-22). Information Age Publishing, Greenwich, CT. Mishra, P., & Koehler, M. J. (2003). Not 'what' but 'how': Becoming designwise about educational technology. In Y. Zhao. (Ed.). What teachers should know about technology: Perspectives and practices (pp. 99-122). Greenwich, CT: Information Age Publishing.
- **Lehrer, R., Jacobson, C., Thoyre, G., Kemeny, V., Strom, D., Horvath, J., Gance, S., & Koehler, M. (1998)**. Developing understanding of geometry and space in the primary grades. In R. Lehrer & D. Chazan(Eds.), *Designing learning environments for developing understanding of geometry and space* (pp. 169-200). Mahwah, NJ: Lawrence Erlbaum Associates.

## **Series Editor**

Punya Mishra and I became the editors for an ongoing series of articles to be authored by students in our program for practioners. We're calling the series "From Research to Practice", and it will be published in India in Education Matters, a magazine published by Educational Technology & Management Academy a non-profit organization based in New Delhi, dedicated to pioneering innovations through research and development.

- **Bedell, K. (in press).** From research to practice: Student engagement. *Education Matters.* (Series edited by P. Mishra & M.J. Koehler)
- **Dodge, A. (2013).** From research to practice: Understanding self-regulation. *Education Matters,* 1(1), 4-6. (Series edited by P. Mishra & M.J. Koehler)

#### **Editorials**

- Bull, G., Park, J., Searson, M., Thompson, A., Mishra, P., Koehler, M. J., and Knezek, G. (2007). Editorial: Developing technology policies for effective classroom practice. *Contemporary Issues in Technology and Teacher Education [Online serial]*, 7(3).
- Fitzer, K. M., Freidhoff, J. R., Fritzen, A., Heintz, A., Koehler, J., Mishra, P., Ratcliffe, J., Zhang, T., Zheng, J., & Zhou, W. (2007). Guest editorial: More questions than answers:

  Responding to the reading and mathematics software effectiveness study. Contemporary Issues in Technology and Teacher Education [Online serial], 7(2).

#### **Invited Presentations**

- **Mishra, P., & Koehler, M.J. (2012, December).** *TPACK: Past, present, and future. Invited presentation to TPACK-Masterclass.* University of Twente, Netherlands.
- **Koehler, M.J., & Mishra, P. (2012, March)**. *TTF to the future!*. Keynote address at the 2012 Teaching Teachers for the Future Conference. Syndey, Australia.
- **Mishra, P., & Koehler, M.J. (2012, March)**. *All TPACK'd and ready to go!*. Keynote address at the 2012 Teaching Teachers for the Future Conference. Syndey, Australia.
- **Koehler, M.J., & Mishra, P. (2011, October)**. *TPACK and beyond ...*. Invited address at the MarchET conference. Eindhoven, Netherlands. October 3, 2011.
- Koehler, M.J., Mishra, P., Deschryver, M., Dore, A., Fedore, M.C., Francis, A., Heintz, A., Isaac, F., & Shin, T.S. (2009, January). *Reflections on teaching, reflections on learning. Presentation in the Online Teaching and Learning Colloquia*, College of Education, Michigan State University. January 22, 2009.
- **Koehler, M.J., & Mishra, P. (2009, Jan)**. Educational Technology & Teacher Education, the TPACK framework. Department of Curriculum Design & Educational Innovation, University of Twente.
- Mishra, P., & Koehler, M.J. (2008, Dec). *Technology integration: Online teaching and learning.* Invited presentation to the Michigan State University Faculty Seminars in Instructional Technology. Michigan State University. December, 2008.
- **Mishra, P., & Koehler, M.J. (2008, Nov).** *Technology integration in teaching: The TPACK framework.* Webinar presented to the International Society for Technology in Education (ISTE), November 20, 2008.

- **Mishra, P., & Koehler, M.J. (2008, Aug).** *Education technology and teacher education, the TPACK framework.* Keynote Address at the Symposium on Education & Technology in Schools: Converging for Innovation. Bangalore, India, August 20-22.
- **Koehler, M.J., & Mishra, P. (2008, May).** *The TPACK framework and teacher education.* Invited presentation given to Chiayi University, Taiwan.
- Mishra, P., & Koehler, M.J. (2008, May). *Technology integration in higher education*. Invited presentation to the Center for Instructional Technology & Multimedia, University Sains Malaysia, Penang. Malaysia.
- **Koehler, M.J., & Mishra, P. (2008, May).** *Technology integration in teaching, understanding the TPACK framework.* Invited presentation to Chung Cheng University, Taiwan.
- **Koehler, M.J., & Mishra, P. (2008, June)**. What do teachers need to know, introducing the TPACK framework. Invited presentation to National Sun Yat-Sen University, Taiwan.
- **Mishra, P., & Koehler, M.J. (2008, June).** *Creativity in Technology Integration and the TPACK framework.* Invited presentation to Faculty of Education, University of Hong Kong. Hong Kong.
- Koehler, M.J., & Mishra, P. (2008, May). What do teachers need to know to integrate technology in their teaching? Introducing TPACK, Technological Pedagogical Content Knowledge. Plenary Address at the Annual Meeting of Global Chinese Conference on Computers in Education (GCCCE), East Lansing, MI, May 5-8.
- **Mishra, P., & Koehler, M.J. (2008, March)**. *Thinking creatively: Teachers as designers of technology, pedagogy and content (tpack)*. Keynote address at the 2008 Annual Meeting of the Society for Information Technology and Teacher Education (SITE), Las Vegas, NV, March 3-7.
- **Mishra, P., & Koehler, M.J. (2008, March)**. *Technology Integration: Challenges and Opportunities*. Invited Address to the 2008 Colloquium on the Changing Professoriate. March 19, 2008. East Lansing, MI.
- **Mishra, P. & Koehler, M.J., (2007, March).** Technological Pedagogical Content Knowledge (TPCK): Confronting the wicked problems of teaching with technology. Invited session at the 2007 Annual Meeting of the Society for Information Technology and Teacher Education (SITE), San Antonio, TX.
- Harris, J., Koehler, M.J., Mishra, P., & Thompson, A. (2007, March). Future directions for TPCK research and development. Invited panel at the 2007 Annual Meeting of the Society for Information Technology and Teacher Education (SITE), San Antonio, TX.
- **Koehler, M.J., & Mishra, P. (2007, February).** *Introducing Technological Pedagogical Content Knowledge (TPCK)*. Invited Address to the 2007 Annual Meeting of the American Association of Colleges for Teacher Education (AACTE), New York.

- **Koehler, M.J. Mishra, P., Hershey, K., & Peruski, L. (2002, Feb)**. *With a little help from your students: A new model for faculty development and online course design*. Presentation to the Instructional Technology Discussion Series. MSU College of Education.
- **Mishra, P., Zhao, Y., Banghart, R., & Koehler, M. (2002).** *Communities of designers: A new model for faculty development and technology integration.* Presentation to the Consortium for Outstanding Achievement in Teaching with Technology.
- **Lehrer, R., Petrosino, A.J., Koehler, M. (1998, June)**. *Hypermedia technologies for case-based teacher education.* Paper presented at the Technology and NCTM Standards 2000 conference, Arlington, VA.

# (Peer Reviewed) Conference Presentations & Proceedings

- \* Conference proceedings
- Koehler, M.J., Mishra, P., & Shin, T.S. (2012, April). *How do we measure technological pedagogical content knowledge? Let me count the ways.* Paper presented at the 2012 Annual American Educational Research Association (AERA) Meeting. Vancouver, WA.
- \*Kereluik, K., Mishra, P., Hagerman, M., DeSchryver, M., Wolf, L., Fisser, P., Shin, T., Terry, L. & Koehler, M. (2012). What would John Dewey Do: Programmatic design for developing TPACK for 21st Century Learning. In P. Resta (Ed.), Proceedings of Society for Information Technology & Teacher Education International Conference 2012 (pp. 4724-4728). Chesapeake, VA: AACE.
- Shin, T. S., Koehler, M. J., & Mishra, P. (2011, April). *A critical review of technological pedagogical content knowledge (TPACK) assessments.* Paper presented at the 2011 Annual Meeting of the American Educational Research Association (AERA), New Orleans, LA, April 8-12.
- \* Zellner, A., Sloan, C. & Koehler, M. (2011). The Educational Affordances of the Flash Mob: From Mobs to Smart Mobs. In M. Koehler & P. Mishra (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2011* (pp. 3042-3047). Chesapeake, VA: AACE.
- Shin, T. S., Mishra, P., & Koehler, M, J. (2011, March). Assessing TPACK, a review of the literature with a special emphasis on the issues of reliability and validity. Paper presented at 2011 Annual Meeting of the Society for Information Technology & Teacher Education International (SITE), Nashville, TN, March 7-11.
- \* Voogt, J., Shin, T., Mishra, P., Koehler, M., Schmidt, D., Baran, E., Thompson, A., Wang, W., Alayyar, G., Fisser, P., Agyei, D., Ormel, B., Velthuis, C., Tondeur, J. & Gibson, D. (2011). Teachers' assessment of TPACK: Where are we and what is needed?. In M. Koehler & P. Mishra (Eds.), Proceedings of Society for Information Technology & Teacher Education International Conference 2011 (pp. 4422-4426). Chesapeake, VA: AACE.

- Mishra, P., Koehler, M.J., Harris, J., & Bull, G. (2010, June). *Considering the "C" in TPACK: Curriculum-based technology integration.* Panel discussion at 2010 Annual Meeting of the International Society for Technology in Education, Denver, Colorado, June 27-30.
- Shin, T. S., Koehler, M. J., Lundeberg, M. A., Zhang, M., Eberhardt, J., Zhang, T., & Paik, S. (2010, April). *The impact of problem-based learning professional development on science teachers' self-efficacy and their teaching practices.* Paper presented at the 2010 Annual American Educational Research Association (AERA) Meeting, Denver, Colorado, April 30 May 4.
- Schmidt, D., Baran, E., Thompson, A., Koehler, M.J., Mishra, P., & Shin, T. (2010, April). *The continuing development, validation, and implementation of a TPACK assessment instrument for preservice teachers.*. Paper presented at the 2010 Annual American Educational Research Association (AERA) Meeting, Denver, Colorado, April 30 May 4..
- Zhang, M., Koehler, M.J., Lundeberg, M.A., Eberhardt, J., & Parker, J. (2010, April). *Understanding science teachers' needs for professional development*. Poster presented at the 2010 Annual American Educational Research Association (AERA) Meeting, Denver, Colorado, April 30 May 4.
- Foster, A.N., Koehler, M. J. & Mishra, P. (2010, April). *Learning in games: Constructing, valuing, and transferring disciplinary knowledge and skills*. Paper presented at the 2010 Annual American Educational Research Association (AERA) Meeting, Denver, Colorado, April 30 May 4.
- Mishra, P., Koehler, M. J., Shin, T. S., Graves-Wolf, L., & DeSchryver, M. (2010, March). Developing TPACK by design. Presentation as part of the symposium, *Strategies for teacher professional development on TPACK*. Presented at the 2010 International Conference of the Society for the Information and Technology & Teacher Education. March 29 April 2, San Diego, CA.
- Schmidt, D., Baram, E., Thompson, A., Mishra, P., Koehler, M. J., & Shin, T. S. (2010, March). The development of an instrument to assess teacher development of TPACK. Presentation as part of the symposium, *Strategies for teacher professional development on TPACK*. Presented at the 2010 International Conference of the Society for the Information and Technology & Teacher Education. March 29 April 2, San Diego, CA.
- \* Voogt, J., Thompson, A., Mishra, P., Fisser, P., Allayar, G., Agyei, D., Koehler, M., et al. (2010). Strategies for teacher professional development on TPACK, Part 2. *Proceedings of Society for Information Technology Teacher Education International Conference 2010* (pp. 3940-3943). Chesapeake, VA: AACE.
- \* Voogt, J., Thompson, A., Mishra, P., Fisser, P., Allayar, G., Agyei, D., Koehler, M., et al. (2010). Strategies for teacher professional development on TPACK, Part 1. *Proceedings of Society for Information Technology Teacher Education International Conference 2010*. Chesapeake, VA: AACE.
- \* Foster, A., Mishra, P. & Koehler, M. (2010). The process of learning in a simulation strategy game: Disciplinary knowledge construction. In D. Gibson & B. Dodge (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2010* (pp. 1903-1910). Chesapeake, VA: AACE.

- \* Kereluik, K., Mishra, P. & Koehler, M. (2010). Reconsidering the T and C in TPACK: Repurposing technologies for interdisciplinary knowledge. In D. Gibson & B. Dodge (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2010* (pp. 3892-3899). Chesapeake, VA: AACE.
- \* Malik, Q., Koehler, M.J., Mishra, P., Buch, N., Shanblatt, M., & Pierce, S.J. (2009). Participation in a freshman design sequence and its influence on students' attitudes towards engineering. Proceedings of 39th Annual ASEE/IEEE Frontiers in Education Conference, San Antonio, TX, Oct 2009.
- \* Malik, Q., Koehler, M.J., Mishra, P., Buch, N., & Shanblatt, M. (2009). Understanding freshman perceptions about engineering. *Proceedings of 2009 ASEE North Central Section Conference*, Grand Rapids, MI, Apr 2009.
- Mishra, P., Koehler, M. J., Shin, T. S., Fedor, M. C., Francis, A. P., DeSchryver, M., & Heintz, A. E. (2009). *Reflections on Teaching "Reflections on Learning."* Paper presented at at the Conference on the Teaching of Educational Psychology, Toronto, Canada.
- Karunaratne, S., Parker, J., Lundeberg, M., Koehler, M.J., & Eberhardt, J. (2009, April). *Taking a step towards professional development through assessments in a Problem-Based Learning (PBL) project.* Paper to be presented at the National Association of Research in Science Teaching Annual Conference, April 17-20, 2009, Garden Grove, CA.
- Schmidt, D., Baran, E., Thompson, A., Koehler, M.J., Shin, T, & Mishra, P. (2009, April). Technological Pedagogical Content Knowledge (TPACK): The Development and Validation of an Assessment Instrument for Preservice Teachers. Paper presented at the 2009 Annual Meeting of the American Educational Research Association. April 13-17, San Diego, California.
- Zhang, M., Eberhardt, J., Lundeberg, M., Koehler, M. J., & Parker, J., (2009, April). See, try, research and reflect: Problem-Based Learning as a model for collaborative teacher research. Paper presented at the annual meeting of American Educational Research Association (AERA), San Diego, April 13-17, 2009.
- Zhang, M., Lundeberg, M., McConnell, T. J., Koehler, M. J., & Eberhardt, J., (2009, April). Strategic facilitation in problem-based professional development to promote science teachers' pedagogical learning. Paper presented at the annual meeting of American Educational Research Association (AERA), San Diego, April 13-17, 2009.
- \* Schmidt, D., Baran, E., Thompson, A., Koehler, M., Punya, M. & Shin, T. (2009). Examining Preservice Teachers' Development of Technological Pedagogical Content Knowledge in an Introductory Instructional Technology Course. In C. Crawford et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2009* (pp. 4145-4151). Chesapeake, VA: AACE.
- \* Shin, T., Koehler, M., Mishra, P., Schmidt, D., Baran, E. & Thompson, A. (2009). Changing Technological Pedagogical Content Knowledge (TPACK) through Course Experiences. In C.

- Crawford et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2009* (pp. 4152-4159). Chesapeake, VA: AACE.
- \* DeSchryver, M., Mishra, P., Koehleer, M. & Francis, A. (2009). Moodle vs. Facebook: Does using Facebook for Discussions in an online course enhance perceived social presence and student interaction?. In I. Gibson et al. (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2009* (pp. 329-336). Chesapeake, VA: AACE.
- Karunaratne, S., Parker, J., Lundeberg, M., Koehler, M.J., & Eberhardt, J. (2009, March). *Facilitation for professional development.* Paper presented at annual the international conference of the Comparative and International Education Society (CIES). March 22-26, 2009. Charleston, South Carolina.
- Rosen, D., Mishra, P., & Koehler, M.J. (2008, Aug). *New literacies, teacher development and technological pedagogical content knowledge (tpack)*. Paper presented at the annual meeting of the Association for Teacher Educators (ATE), Washington, D.C., Aug 5, 2008.
- McConnell, T. J., Zhang, T., Eberhardt, J., Koehler, M., Stanaway, J., Parker, J., & Lundeberg, M. (2008, March). "I'm invested in the outcome": Professional development that matters in the eyes of teachers. Paper presented at the National Association for Research in Science Teaching 2008 Annual International Conference, Baltimore, MD, April 2, 2008.
- \* Gao, F., Noh, J.M. & Koehler, M.J. (2008). Comparing student interactions in Second Life and face-to-face role-playing activities. In K. McFerrin et al. (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2008* (pp. 2033-2035). Chesapeake, VA: AACE.
- Koehler, M.J., & Mishra, P. (2008, March). *Technological pedagogical context knowledge (tpck):*Discussions with leaders in the field. Roundtable discussion held at the Annual Meeting of the American Educational Research Association, New York, March 24-28.
- Mishra, P., & Koehler, M.J. (2008, March). *Introducing technological pedagogical content knowledge*. Paper presented the Annual Meeting of the American Educational Research Association, New York, March 24-28.
- Zhang, M., Lundeberg, M. A., McConnell, T. J., Koehler, M. J., & Eberhardt, J., (2008, March). Conditions for collaborative knowledge construction of inservice science teachers in problem-based professional development. Paper presented at the Annual Meeting of National Association for Research in Science Teaching, Baltimore, MD, March 30-July 2, 2008.
- Zhang, M., McConnell, T. J., Lundeberg, M. A., Koehler, M. J., & Eberhardt, J., (2008, March). Teachers' burning questions: Understanding challenges that science teachers face and problem-based learning as a framework to support teacher research. Poster presented at the Annual Meeting of National Association for Research in Science Teaching, Baltimore, MD, March 30-July 2, 2008.

- Lundeberg, M., Koehler, M., Zhang, M., McConnell, T. J., & Eberhardt, J. (2008, March). "It's like a mirror in my face": Using video analysis in learning communities of science teachers to foster reflection on teaching dilemmas. Paper presented as part of the Symposium "High Tech High Touch: Creating Discourse Communities Around Video Cases in Literacy, Science and Mathematics" (Chair Matthew J. Koehler) at the 2008 American Educational Research Association Annual Meeting, New York, NY, March 24-28.
- Koehler, M.J. & Mishra, P. (2008, February). *Taking learning to a higher level: The TPACK framework*. Part of the Major Forum "When Multiple Technologies Take Learning to a Higher Level: The Technological Pedagogical Content Knowledge (TPCK) Framework and Curricular Exemplars" Presented at the 2008 Annual the Annual Meeting of the American Association of Colleges for Teacher Education, New Orleans, Feb 7-10, 2008.
- McConnell, T. J., Lundeberg, M. A., Koehler, M. J., Urban-Lurain, M., Zhang, T., Mikeska, J., Parker, J., Zhang, M, & Eberhardt, J. (2008, January). *Video-based teacher reflection What is the real effect on reflections of inservice teachers?* Paper presented at the Association for Science Teacher Education 2008 International Conference, St. Louis, MO, January 12, 2008.
- McConnell, T. J., Stanaway, J. C., Parker, J. M, Eberhardt, J., Lundeberg, M.A, & Koehler, M. J. (2008). Influencing pedagogical content knowledge of inservice science teachers through problem-based learning. Paper presented at the Association for Science Teacher Education 2008 International Conference, St. Louis, MO, January 11, 2008.
- Zhang, T., McConnell, T. J., Lundeberg, M. A., Koehler, M. J., Stanaway, J., Zhang, M., Urban-Lurain, M., Eberhardt, J., & Parker, J. (2008, January). *If you build it, why will they come back? Motivation of teachers to re-enroll in a professional development project.* Paper presented at the Association for Science Teacher Education 2008 International Conference, St. Louis, MO, January 10, 2008.
- Weizman, A., Lundeberg, M. A., Koehler, M. J., & Eberhardt, J. (2007, August). *The influence of problem based learning professional development on science teachers' pedagogical content knowledge.* Paper presented at the Annual Meeting of the European Science Education Research Association, Malmo, Sweden.
- \* Lundeberg, M., Koehler, M., Eberhardt, J., Parker, J., Zhang, M., McConnell, T., & Weizman, A. (2007, June). *Preparing science teachers using a problem-based learning framework.*Conference proceedings of the International Academic Conference of Preparing Quality Science Teachers for Elementary and Secondary Schools. National Science Council (Taiwan), May 31 June 2, 2007. Taipei, Taiwan.
- Mikeska, J.N., Koehler, M.J., Weizman, A., & Lundeberg, M.A. (2007, April). *Designing teaching dilemmas for problem-based learning professional development* Roundtable discussion at the 2007 Annual Meeting of the American Educational Research Association, Chicago, IL.
- Harris, J., Mishra, P., & Koehler, M.J., (2007, April). *Teachers' technological pedagogical content knowledge: curriculum-based technology integration reframed.* Paper presented at the 2007 Annual Meeting of the American Educational Research Association, Chicago, IL.

- \* Koehler, M.J., & Mishra, P. (2007). Technological Pedagogical Content Knowledge (TPCK): Confronting the wicked problems of teaching with technology. In R. Carlsen, K. McFerrin, J. Price, R. Weber, & D.A. Willis (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2007* (pp. 2214-2226). Chesapeake, VA: AACE.
- \* Peruski, L., Mishra, P., Rosaen, C., & Koehler, M.J. (2007). Boundary crossings: An activity theoretical analysis of technology diffusion in a teacher education program. In R. Carlsen, K. McFerrin, J. Price, R. Weber, & D.A. Willis (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2007* (pp. 1647-1653). Chesapeake, VA: AACE.
- \* Peruski, L., Mishra, P., & Koehler, M.J. (2007). Developing technological pedagogical content knowledge (TPCK) through teaching online. In R. Carlsen, K. McFerrin, J. Price, R. Weber, & D.A. Willis (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2007* (pp. 2208-2213). Chesapeake, VA: AACE.
- Hilden, K., Phillips, M. M., Lundeberg, M., & Koehler, M. J. (2006, November). *Are a thousand words worth a picture? Protocol differences in evaluation and cognitive processing of video and text cases in science.* Paper presented at the 2006 Annual Meeting of the National Reading Conference (NRC), Los Angeles, CA.
- \* Foster, A., Koehler, M.J., & Mishra, P. (2006). Game-based learning of physics content: The effectiveness of a physics game for learning basic physics concepts. *In Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications 2006* (pp. 2119-2125). Chesapeake, VA: AACE.
- Weizman, A., Covitt, B.A., Koehler, M.J., Lundeberg, M.A., Jang, S., Oslund, J.A., Low, M.R., Eberhardt, J., & Urban-Lurain, M. (2006, April). What do teachers learn from a problem-based learning approach to professional development in science education? Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA.
- Oslund, J.A., Low, M., Mikeska, J.N., Weizman, A., Lundeberg, M., Koehler, M.J., & Eberhardt, J. (2006, April). *Creating problems for teachers: Research on constructing problem-based materials to enhance science content knowledge.* Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA.
- Oslund, J.A., Koehler, M.J., Lundeberg, M.,. Low, M., Parker, J., Eberhardt, J., Urban-Lurain, M., & Jang, S. (April, 2006). *Problem-based learning designed for science and mathematics professional development.* Roundtable discussion at the 2006 Annual Meeting of the American Educational Research Association, San Francisco, CA.
- Foster, A. N., Koehler, M. J., & Mishra, P. (2005, October). *Game based learning of physics content.*Poster presented at Future Play 2005: The International Academic Conference on the Future of Game Design and Technology, East Lansing, MI.
- \* Phillips, M. M., Koehler, M.J., Zhang, G., Yadav, A., & Rosaen, C. (2005). Results of an experiment evaluating the use of video cases to help pre-service teachers become better teachers of literacy. In P. Kommers & G. Richards (Eds.), *Proceedings from the World Conference on*

- *Educational Multimedia, Hypermedia and Telecommunications 2005* (pp. 585-592). Chesapeake, VA : AACE.
- \* Dirkin, K., Yadav, A., Koehler, M.J., Hilden, K., Phillips, M.M., & Lundeberg, M. (2005). Is the movie better than the book? Differences in engagement and delayed recall of video and text cases in science. In *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications 2005* (pp. 4196-4201). Chesapeake, VA: AACE.
- Koehler, M.J., Mishra, P., & Yadav, A. (2005, April). *The development of Technological Pedagogical Content Knowledge in a design seminar.* Paper presented at the Annual Meeting of the American Educational Research Association, Montreal, Canada.
- Yadav, A., & Koehler, M.J. (2005, April). *An analysis of the interaction of preservice teachers' epistemological beliefs and video teaching cases.* Paper presented at the Annual Meeting of the American Educational Research Association, Montreal, Canada.
- \* Mishra, P., & Koehler, M.J. (2005). Educational technology by design: Results from a survey assessing its effectiveness. In C. Crawford et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2005* (pp. 1511-1517). Chesapeake, VA: AACE.
- \* Yadav, A., & Koehler, M.J. (2005). A qualitative study about the role of preservice teachers' beliefs in learning from literacy instruction video-cases. In C. Crawford et al. (Eds.) Proceedings of Society for Information Technology and Teacher Education International Conference 2005 (pp. 3427-3432). Chesapeake, VA: AACE.
- \* Lima, M., Koehler, M.J., &; Spiro, R.J. (2004). Cognitive flexibility hypertexts and the development of creative and critical thinking in business education: The Panteon project. *Proceedings of XXVIII Encontro Anual ASSOCIAÇÃO NACIONAL DE PÓS-GRADUAÇÃO EM ADMINISTRAÇÃO*. Curitiba, Brazil. Anapad.
- \* Koehler, M.J., Mishra, P., Yahya, K., & Yadav, A. (2004). Successful teaching with technology: The complex interplay of content, pedagogy, and technology. In C. Crawford et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2004* (pp. 2347-2354) Chesapeake, VA: AACE.
- Phillips, M.M., & Koehler, M.J. (2004, April). *Towards an understanding of how media preferences affect what students learn.* Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Koehler, M.J., Mishra, P., & Yahya, K. (2004, April). *Content, pedagogy, and technology: Testing a model of technology integration.* Paper presented at the annual meeting of the American Educational Research Association, April 2004, San Diego, CA.
- Rosaen, C. L., Johnson, M. K., Koehler, M.J. & Ruggerio, C. (2004, March). *Exploring IVAN: Interactive Video Access Neighborhood.* Poster presented at International Conference for the Society for Information Technology and Teacher Education, Atlanta, GA.

- Wong, D., Mishra, P., Koehler, M.J., & Siebenthal, S. (2003, April). *Teacher as filmmaker: iVideos, technology education, and professional development.* Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL.
- Lima, M., Koehler, M.J., & Spiro, R. (2002, August). *Organizational learning with a multi-perspective hypertextual interface for knowledge management.* Paper presented at the 5th International Symposium on Knowledge Management, Brazil.
- Koehler, M.J. Mishra, P., Hershey, K., & Peruski, L. (2002, April). *Learning through design: Faculty development and online course development.* Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.
- \* Mishra, P., Koehler, M.J., Hershey, K., & Peruski, L. (2002). With a little help from your students: A new model for faculty development and online course design. In C. Crawford et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2002* (pp. 688-692). Chesapeake, VA: AACE.
- \* Mishra, P., Koehler, M.J., Hershey, K., & Peruski, L. (2001). Learning through design: faculty development and online course development. *Proceedings from the Seventh Sloan-C International Conference on Online Learning: Emerging Standards of Excellence in Asynchronous Learning Networks,*. Orlando, FL.
- Koehler, M.J. (2001, April). *Designing cases that help teachers learn about children'>s mathematical thinking..* Paper presented at the Annual Meeting of the American Educational Research Association, Seattle, WA.
- \* MSU PT3 Team (2001). Technology and Teacher Education: An Ecological Approach.

  Proceedings of Society for Information Technology and Teacher Education International
  Conference 2001. Charlottesville, VA: AACE.
- Urban-Lurain, M., Mishra, P., Koehler, M.J., & Banghart, R. (2001, April). *Fluency with information technology (FITness): The computer science perspective.* Paper presented at the Annual Meeting of the American Educational Research Association, Seattle, WA.
- \* Mishra, P., & Koehler, M. J. (2001). Putting the Instructor in Charge: Component Architecture and the Design of a Course Web Site. In C. Crawford et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2001* (pp. 68-69). Chesapeake, VA: AACE.
- \* Koehler, M.J., Petrosino, A.J., & Lehrer, R. (1999). Elements of case design for hypermedia environments in teacher education. In B. Collins & R. Olliver (Eds.) *Proceedings from ED-Media 99, World Conference on Educational Multimedia, Hypermedia & Telecommunications.* (pp. 1414-1415). Charlottesville, VA: AACE.
- \* Koehler, M.J., Petrosino, A.J., & Lehrer, R. (1998). Designing cases for hypermedia environments in teacher education. In A. Bruckman, M. Guzdial, J. Kolodner, & A. Ram (Eds.), *Proceedings from the International Conference of the Learning Sciences, 1998* (pp. 324-325). Charlottesville, VA: AACE

- \* Lehrer, R., Petrosino, A.J., Koehler, M. (1998, June). Hypermedia technologies for case-based teacher education. *Proceedings from the Technology and NCTM Standards 2000 Conference*. Arlington, VA.
- Lu, Y., Koehler, M.J., Lehrer, R., & Tsai, W. (1997, October). *A framework for developing web-based educational applications: Using a relational database to connect the design of authoring and navigational tools.* Paper presented at the World Conference on the World Wide Web, Internet, and Intranet, Toronto, Canada.
- \* Koehler, M.J., & Lehrer, R. (1997). Designing an effective hypermedia learning tool. *Proceedings* from ED-Media 97, World Conference on Educational Multimedia, Hypermedia & Telecommunications. Charlottesville, VA: AACE.
- Koehler, M.J., & Levin, J. R. (1996, April). A sharper analytical tool for the multiple-baseline design. Paper presented at the annual meeting of the American Educational Research Association, New York, NY.

# Software & Curriculum Design

- **Koehler, M.J. (2012).** *RegRand 2.0* [Analysis software to compute regulated randomization statistics described in Koehler & Levin (1998)].
- **Koehler, M.J., & Dirkin, K. (2005).** *Technology for authentic problem solving (TAPS) video browser.*
- Koehler, M.J., Zhang, G., Yadav, A., Phillips, M.M., Diamond, K., Powell, D., & Robbins, C. (2005). Classroom Links to Early Literacy.
- Rosaen, C., Koehler, M., Phillips, M., Pardo, L. Yadav, A., Johnson, M. (2005). Literacy Teaching and Learning: Kindergarten [IVAN Multi-media software, developer: Charles Ruggerio]. East Lansing, MI: Michigan State University, College of Education.
- Rosaen, C., Koehler, M., Phillips, M., Pardo, L. Yadav, A., Johnson, M. (2005). *Literacy Teaching and Learning: First Grade* [IVAN Multi-media software, developer: Charles Ruggerio]. East Lansing, MI: Michigan State University, College of Education.
- Rosaen, C., Koehler, M., Phillips, M., Pardo, L. Yadav, A., Johnson, M. (2005). *Literacy Teaching and Learning: Second Grade* [IVAN Multi-media software, developer: Charles Ruggerio]. East Lansing, MI: Michigan State University, College of Education.
- **Koehler, M.J. (2002).** *Modeling in Mathematics and Science: Growth and Diversity* [A website devoted to helping teachers develop modeling practices in primary grade science curriculum]. East Lansing, MI: Author.
- **Koehler, M.J., & Mishra, P. (2002)**. *Inverso* [Computer authored Haiku published in the Interactive Multimedia Electronic Journal of Computer-Enhanced Learning].

- **Koehler, M.J. (1999)**. *Understanding Measurement*. [Macintosh DVD Software]. Madison, WI: Author.
- **Koehler, M.J. (1998).** *RegRand* [Analysis software to compute regulated randomization statistics described in Koehler & Levin (1998)]. Madison: WI. Author.
- Koehler, M.J., Lehrer, R., Carpenter, T., Fennema, E., & Empson, S. (1996). *HyperCGI: Add & Subtract* [Macintosh CD-ROM Software]. Madison, WI: Authors.
- Koehler, M.J., Lehrer, R., Carpenter, T., Fennema, E., & Empson, S. (1996). *HyperCGI:*Multiplication & Division [Macintosh CD-ROM Software]. Madison, WI: Authors.Koehler, M.J. (1993). An ACT-R implementation of CHIPS [ACT-R computer program]. Madison, WI: Author.

## **Other Publications**

**Koehler, M.J. (1999).** Designing case-based hypermedia tools to help teachers understand children's mathematical development. Unpublished doctoral dissertation, University of Wisconsin, Madison.

# **SERVICE**

# Department, College, and University

2000-2006	Department Curriculum Committee (Chair from 2002-2005)
2001-2006	College Curriculum Committee (Chair 2004-2005)
2006-2009	Department Faculty Advisory Committee (Chair 2007-2009)
2006 - 2008	Masters of Art in Education (MAED) Academic Personnel Policy Committee (APPC)
2007-present	Co-cordinator of Doctoral Program in Educational Psychology and Educational Technology
2009-2010	Department Reappointment, Promotion, and Tenure Committee
2010-present	Director of the Hybrid PhD program in Educational Technology

## National and International

2010-present Conference Program Comittee, Society for Information Technology

and Teacher Education

2008-2011	Vice-Chair of TPACK Society for Information Technology and Teacher Education (SITE) Special Interest Group SIG
2010-2011	Program Co-chair for the 2011 Society for Information Technology and Teacher Education (SITE) Annual Meeting
2009–2011	Executive Board, Society for Information Technology and Teacher Education (SITE)
2000-2004	Reviewer for Journal of the Learning Sciences
2002-present	Reviewer for Cognition and Instruction
2000-present	Reviewer for the Journal of Educational Computing Research
2003-Present	Editorial Board Cognition and Instruction
2008-Present	Standing Review Panel Member for the Institute of Educational Sciences (IES).
2007-Present	Executive Editor of TPACK Wiki (tpack.org)

# **AWARDS**

- 2013 American Association of Colleges of Teacher Education (AACTE) Best Practice Award for the Innovative use of Technology
- 2013 MSU AT&T Instructional Technology Award. Honorable Mention for Fully Online Course.
- 2008 –MSU-AT&T Instructional Technology Award: Best fully online course.