**Thomas Andrew Brush**

Indiana University

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**EDUCATION** **Ph.D. in Special Education,** 1995

Indiana University, Bloomington, IN

Cognate Area: Instructional Systems Technology

Research Interests: Design of inquiry-oriented learning environments;

Technology integration and teacher education.

**Master of Science in Education,** 1988

Potsdam College of SUNY, Potsdam, NY

Major: Instructional Technology

Honors & Awards: Kappa Delta Pi, Education Honor Society

**Bachelor of Arts in Mathematics,** 1986

Potsdam College of SUNY, Potsdam, NY

Minor: Secondary Education

Teaching Certification: Math 7-12

Honors: Pi Mu Epsilon, Mathematics Honor Society

**EXPERIENCE** **Barbara B. Jacobs Chair in Education and Technology**

Indiana University, Bloomington, IN

Endowed Chair for the School of Education. (7/10 – present)

**Professor, Instructional Systems Technology**

Indiana University, Bloomington, IN

Faculty in School of Education. (7/09 – present)

**Chair, Instructional Systems Technology Department**

Indiana University, Bloomington, IN

Department Chair for IST Department at Indiana

University’s School of Education. (7/12 – 6/18; 1/19 – 5/19)

**Associate Dean for Teacher Education**

Indiana University, Bloomington, IN

Head administrator for teacher education at Indiana

University’s School of Education. (7/08 – 6/12)

**Associate Professor, Instructional Systems Technology**

Indiana University, Bloomington, IN

Faculty in School of Education. (8/02 – 6/09)

**Associate Professor and Program Leader, Educational**

**Technology**

Arizona State University, Tempe, AZ

Faculty and program leader for Ed. Technology. (7/01 – 8/02)

**Assistant Professor, Educational Media/Educational Technology**

Arizona State University, Tempe, AZ

Junior faculty in Ed. Media/Ed. Technology. (8/98 – 6/01)

**Assistant Professor, Educational Media**

EFLT Department, Auburn University, Auburn, AL

Graduate faculty in Educational Technology. (9/95 – 8/98)

**Director of Instructional Technology**

Mt. Clemens Community School District, Mt. Clemens, MI

Oversaw all aspects of technology and instruction for the

district. Developed and presented in-service opportunities for

faculty. Managed technology budget. (1/93 - 9/95)

**Associate Director for Technology**

Indiana University, Center for Media and Teaching Resources

Consulted with faculty and public school clients on technology-based

instructional development projects. Oversaw administration, design,

and evaluation of technology-based instructional projects. (1991 –

1992)

**Project Director, Instructional Services**

Indiana University, School of Education

Developed instructional materials and supervised audio-visual center.

Consulted with faculty on teaching (1990 – 1991).

**Research and Development Assistant**

Indiana University, Department of Special Education

Developed and field-tested instructional materials.

Taught field-based classes using distance learning techniques.

Assisted with communication technology. (1989 - 1992)

**TEACHING Indiana University, Bloomington, IN**

**EXPERIENCE**

Graduate Courses Taught

J762 – Doctoral Seminar: Inquiry-Based Learning

R795 – Dissertation Proposal Preparation (*online*)

R711 – Readings in Instructional Systems Technology *(F2F & online)*

R695 – Doctoral Research Seminar for EdD Students *(online)*

R695 – Doctoral Research Seminar for PhD Students

R695 – Doctoral Seminar: Technology Integration in K-12 Settings

R685 – Technology Training in Pre-Service and Inservice Education

R622 – Learning Environment Design (*online*)

R621 – Needs Analysis and Assessment (*F2F & online*)

R620 – Task Analysis for Performance Improvement (*online*)

R561 – Evaluation in the Instruct Des/Dev Process (*F2F & online*)

R541 – Development and Production Processes (*online*)

R521 – Instructional Design and Development *(F2F & online)*

R511 – Instructional Technology Foundations *(online)*

R505 – Leadership Issues in Educational Technology *(online)*

R505 – Masters Portfolio *(F2F & online)*

Undergraduate Courses Taught

W210 – Computers in Education

W301 – Integrating Technology into Teaching I

W435 – Leadership Issues in Educational Technology

**Arizona State University, Tempe, AZ**

Graduate Courses Taught

EMC598 – Learning Environments

EDT531 – Hypermedia

EDT504 – Development of Computer-Based Instruction

EDT511 – Technology Applications in Education

EMC528 – Media Production

EMC525 – Web-Based Development

EMC505 – Presentation Technologies

**Auburn University, Auburn, AL**

Graduate Courses Taught

EM630 - Community Information and Reference Sources

EM651 - Research in Educational Media

EM670 - Advanced Computer-Based Instructional Design

EM671 - Computer-Based Instructional Strategies

EM672 - Emerging Technologies in Education

EM685 - Computer Graphics in Educational Applications

EDL750 - Doctoral Seminar in Educational Leadership

Undergraduate Courses Taught

EM200 - Teaching with Technology

EM370 - Microcomputer Concepts and Applications

**AWARDS** 2022 Outstanding Empirical Journal Article Award (co-author

with Dr. Haesol Bae), *Association for Educational*

*Communications and Technology*.

2018 Young Researcher Award (co-author with Ms. Suhkyung Shin),

*Association for Educational Communications and Technology*.

2014 Young Researcher Award (co-author with Ms. Sungwon Shin),

*Association for Educational Communications and Technology*.

2014 NTLI Fellows Award (co-recipient with Dr. Cory Callahan and

Dr. John Saye). *Presented by the Society for Information*

*Technology and Teacher Education*.

2013 Technology Paper Award (co-author with Dr. Cory Callahan and

Dr. John Saye). *Presented by the College and University Faculty*

*Assembly of the National Council for Social Studies*.

2012 Excellence in Education Award, *Presented by the Office of*

*Disability Services, Indiana University*.

2011 Leadership Award. *Presented by SIG-Instructional Technology*

*of the American Educational Research Association*.

2010 Appointed Barbara B. Jacobs Chair for Education and

Technology. *Indiana University School of Education*.

2010 Presidential Award for Service. *Presented by the Association for*

*Educational Communications and Technology.*

2010 Research Paper Award for Excellence (co-author with Ms. Susie

Gronseth). *SIG-Teacher Education of the International Society for*

*Technology in Education*.

2008 Trustees Teaching Award – Nominee. *Indiana University School*

*of Education*.

2007 Award for Excellence in Mentoring. *Indiana University School*

*of Education.*

2007 GPSO Faculty Mentoring Award – Nominee. *Indiana University*.

2006 Young Scholar Award (co-author with Dr. Khe Foon Hew),

*Association for Educational Communications and Technology*.

2003 Best Paper Award – Honorable Mention. *American Educational*

*Research Association, SIG – Research in Social Studies*.

1998-99 Best Paper Award, *Arizona Educational Research*

*Organization*.

1998 Young Scholar Award, *Association for Educational*

*Communications and Technology*.

1998 Nominee for best paper, *Eastern Educational Research*

*Association*.

1992 Award - Best Field-based Application of Technology. *Society*

*for Information Technology and Teacher Education*.

**BOOKS** Brush, T. & Saye, J. (2017). *Successfully implementing problem-*

*based learning in classrooms: Research in K-12 and teacher*

*education*. West Lafayette, IN: Purdue University Press.

**REFEREED** Kwon, K., Brush, T., Kim, K., & Seo, M. (2025). Embodied learning

**PUBLICATIONS** for computational thinking in a mixed reality context. *Journal of*

*Educational Computing Research, 62*(8), 1939-1960,

Batchelder, S., Kuratko, D., Brush, T., & Karlin, M. (2024). The

challenge of gender diversity for case-based instruction in

entrepreneurship education. *Entrepreneurship Education and*

*Pedagogy, 0*(0). <https://doi.org/10.1177/25151274241247827>

Feng, C., Bae, H., Glazewski, K., Hmelo-Silver, C., Brush, T., Mott,

B., Lee, S., & Lester, J. (2024). Exploring facilitation strategies to

support socially shared regulation in a problem-based learning

game. *Educational Technology & Society, 27*(3), 318-334.

Slamet, T., Brush, T., & Kwon, K. (2024). The effects of competition

in gamified online discussions on learners’ behavioral and

cognitive engagement. *Technology, Knowledge, and Learning.*

<https://doi.org/10.1007/s10758-024-09740-7>

Kwon, K., Jeon, M., Zhou, C., Kim, K., & Brush, T. (2022). Embodied

learning for computational thinking in early primary education.

*Journal of Research on Technology in Education, 56*(4), 410-430.

Brush, T., Glazewski, K., Shin, S., & Shin, S. (2021). Implementation

of a technology-supported socioscientific inquiry unit in high

school biology: Impact on student achievement and attitudes.

*Journal of Computers in Mathematics and Science Teaching,*

*40*(4), 303-330*.*

Kwon, K., Jeon, M., Guo, M., Yan, G., Kim, J., Ottenbreit-Leftwich,

A., & Brush, T. (2021). Computational thinking practices: Lessons

learned from a problem-based curriculum in primary education.

*Journal of Research on Technology in Education*.

Ottenbreit-Leftwich, A., Kwon, K., Brush, T., Karlin, M., Jeon, M.,

Jantaraweragul, K., Guo, M., Nadir, H., Gok, F., Bhattacharya, P.

(2021). The impact of an issue-centered problem-based learning

curriculum on 6th grade girls’ understanding of and interest in

computer science. *Computers and Education Open, 2*, 1-11.

Winters, S., Farnsworth, K., Berry, D., Ellard, S., Glazewski, K., &

Brush, T. (2021). Supporting middle school students in a problem-

based makerspace: Investigating distributed scaffolding.

*Interactive Learning Environments.*

Kwon, K., Ottenbreit-Leftwich, A., Brush, T., Jeon, M., & Yan, G.

(2021). Integration of problem-based learning in elementary

computer science education: Effects on computational thinking and

attitudes. *Educational Technology Research and Development*, *69*,

2761–2787.

Bae, H., Glazewski, K., Brush, T., & Kwon, K. (2021). Fostering

transfer of responsibility in the middle school PBL classroom: An

investigation of soft scaffolding. *Instructional Science, 49*, 337-

363.

Ding, A., Qu, P., Glazewski, K., Bae, H., Ergulec, F., Nadir, H., &

Brush, T. (2021). The dilemmas of teaching dilemmas in a foreign

language classroom. *International Journal of Designs for*

*Learning, 12*(3), 86-101.

Brush, T., Ottenbreit-Leftwich, A., Kwon, K., & Karlin, M. (2020).

Implementing socially relevant problem-based computer science

curriculum at the elementary level: Students’ computer science

knowledge and teachers’ implementation needs.*Journal of*

*Computers in Mathematics and Science Teaching, 39*(2), 109-123.

Richardson, J., Brush, T., Ottenbreit-Leftwich, A., Karlin, M., Leary,

H., Shelton, B., Lowell, V., Exter, M., Strycker, J., & Shin, S.

(2020). Innovation in instructional design and technology

programs: A view from PIDT 2018. *Tech Trends, 64*, 432-438.

Shin, S., Brush, T. A., & Glazewski, K. D. (2020). Examining the

hard, peer, and teacher scaffolding framework in inquiry-based

technology-enhanced learning environments: Impact on academic

achievement and group performance. *Educational Technology*

*Research and Development*, *68,* 2423-2447.

Shin, S., Brush, T. A., & Glazewski, K. D. (2020). Patterns of peer

scaffolding in technology-enhanced inquiry classrooms:

Application of social network analysis. *Educational Technology*

*Research and Development*, *68,* 2321–2350.

Kohlmeier, J., Howell, J., Saye, J., McCormick, T., Shannon, D.,

Jones, C., & Brush, T. (2020). Investigating teacher adoption of

authentic pedagogy through lesson study. *Theory and Research in*

*Social Education, 48*(4), 492-528.

Sadik, O., Ottenbreit-Leftwich, A.T., & Brush, T.A. (2020).

Secondary computer science teachers’ pedagogical

needs. *International Journal of Computer Science Education in*

*Schools, 4*(1), 33-52*.*

Shin, S., Brush. T., Saye, J., & Zhang, Z. (2019). Integrating

classroom video cases into a teaching methods course: A two-year

journey of curriculum redesign. *International Journal of Designs*

*for Learning, 10*(1), 35-52.

Shin, S., Brush, T., & Saye, J. (2019). Using technology-enhanced

cases in teacher education: An exploratory study in a social studies

methods class. *Teaching and Teacher Education, 78*, 151-164.

Ottenbreit-Leftwich, A., Glazewski, K., Brush, T., Aslan, S., &

Zachmeier, A. (2018). Addressing technology integration

concerns: Asynchronous video mentoring between pre-service

teachers and exemplary technology-using in-service teachers.

*Australasian Journal of Educational Technology*, *34*(4), 1-15.

Kwon, K., Shin, S., Brush, T., Glazewski, K., Edelberg, T., Park, S.,

Khlaif, Z., Nadiruzzaman, H., & Alangari, H. (2018). Inquiry

learning behaviors captured through screencasts in problem-based

learning. *Interactive Learning Environments*, *26*(6), 839-855.

Liao, Y-C., Ottenbreit-Leftwich, A., Karlin, M., Glazewski, K., &

Brush, T. (2017). Supporting change in teacher practice:

Examining shifts of teachers’ professional development

preferences and needs for technology integration. *Contemporary Issues in Technology and Teacher Education, 17*(4). Retrieved

from <http://www.citejournal.org/volume-17/issue-4-17/general/supporting-change-in-teacher-practice-examining-shifts-of-teachers-professional-development-preferences-and-needs-for-technology-integration>.

Saye, J. W., Kohlmeier, J., Howell, J. B., McCormick, T. M., Jones, R.

C., & Brush, T. (2017). Scaffolded lesson study: Promoting

professional teaching knowledge for problem-based historical

inquiry. *Social Studies Research and Practice, 12*(1), 95-112.

Wallace, S., Banks, T., Sedas, M., Glazewski, K., Brush, T., &

McKay, C. (2017). What will keep the fish alive? Exploring the

intersections of designing, making, and inquiry among middle

school learners. *International Journal of Designs for Learning*,

*8(*1), 11-21.

Shin, S., Brush, T., & Glazewski, K. (2017). Designing and

implementing web-based scaffolding tools for technology-

enhanced socioscientific inquiry. *Educational Technology and*

*Society, 20*(1), 1-12.

Brush, T., Shin, S., Shin, S., Jung, J., Gensic, J., & Glazewski, K.

(2016). Design and implementation of a technology-supported

socioscientific inquiry unit in high school biology. *International*

*Journal of Designs for Learning, 7*(2), 1-10.

Callahan, C., Saye, J., & Brush, T. (2016). Interactive and

collaborative professional development for in-service history

teachers. *The Social Studies, 107*(6), 227-243.

vanLeusen, P., Ottenbreit-Leftwich, A., & Brush, T. (2016).

Interpersonal consulting skills for instructional technology

consultants: A multiple case study. *TechTrends, 60*(3), 253-259.

Callahan, C., Saye, J., & Brush, T. (2015). Supporting in-service

teachers' professional teaching knowledge with educatively

scaffolded digital curriculum. *Contemporary Issues in Technology*

*and Teacher Education*, *15*(4). Retrieved from

<http://www.citejournal.org/vol15/iss4/socialstudies/article2.cfm>.

Zhang, Z., Brush, T., & Shin, S. (2014). Open source software in

development of functional education website: Concepts and

practice [published in Chinese]. *The Chinese Journal of ICT in*

*Education, 336*, 87–89. **Published in 2015**.

Brush, T. & Saye, J. (2014). An instructional model to support

problem-based historical inquiry: The Persistent Issues in History

Network. *Interdisciplinary Journal of Problem-Based Learning,*

*8*(1).

Glazewski, K., Shuster, M., Brush, T. & Ellis, A. (2014).

Conexiones: Fostering socioscientific inquiry in graduate teacher

preparation. *Interdisciplinary Journal of Problem-Based Learning,*

*8*(1).

Shen, Y.W., Reynolds, T., Bonk, C., & Brush, T. (2013). A case study

of applying blended learning in an accelerated post-baccalaureate

teacher education program. *Journal of Educational Technology*

*Development and Exchange, 6*(1), 59-78.

Callahan, C., Saye, J., & Brush, T. (2013). Designing web-based

educative curriculum materials for the social studies.

*Contemporary Issues in Technology and Teacher Education*,

*13*(2). Retrieved from

<http://www.citejournal.org/vol13/iss2/socialstudies/article1.cfm>

Ottenbreit-Leftwich, A., Brush, T., Strycker, J., Gronseth, S., Roman,

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J. (2012). Preparation versus practice: How do teacher education

programs and practicing teachers align in their use of technology

to support teaching and learning? *Computers & Education, 59*(2),

399-411.

Kale, U., Brush, T., Bryant, A., & Saye, J. (2011). Online

communication patterns of teachers. *Journal of Interactive*

*Learning Research, 22*(4), 489-520.

Kohlmeier, J., Saye, J., Mitchell, L., & Brush, T. (2011). Using

mentoring to support a novice teacher using problem based

historical inquiry with “low achieving” students. *The Journal of*

*Social Studies Research, 35*(1), 56-79.

Gronseth, S., Brush, T., Ottenbreit-Leftwich, A., Strycker, J., Abaci,

S., Easterling, W., Roman, T., Shin, S., & van Leusen, P. (2010).

Equipping the next generation of teachers: Technology preparation

and practice. *Journal of Digital Learning in Teacher Education,*

*27*(1), 20-26.

Hur., J., Cullen, T., & Brush, T. (2010). Teaching for application: A

model for assisting pre-service teachers with technology

integration. *Journal of Technology and Teacher Education*, *18*(1),

161-182.

Callahan, C., Saye, J., & Brush, T. (2009-2010). Educative curriculum

materials to develop social studies teachers' professional

teaching knowledge. *International Journal of Social Education,*

*24*(2), 5-33. **Published in 2013**.

Saye, J., Kohlmeier, J., Brush, T., Howell, J., & Maddox, L. (2009-

2010). Assessing the effects of a teacher education program on

pre-service secondary social studies teachers' instructional

decision-making. *International Journal of Social Education, 24*(2),

35-76. **Published in 2013**.

Brush, T., & Saye, J. W. (2009). Strategies for preparing preservice

social studies teachers to integrate technology effectively:

Models and practices. *Contemporary Issues in Technology and*

*Teacher Education* [Online serial], *9*(1). Retrieved from

<http://www.citejournal.org/vol9/iss1/socialstudies/article1.cfm>.

. Brush, T., Saye, J., Kale, U., Hur, J., Kohlmeier, J., Yeasimou. T.,

Guo, L., & Symonette, S. (2009). Evaluation of the Persistent

Issues in History Laboratory for Virtual Field Experience (PIH-

LVFE)*. Journal of Interactive Online Learning* [Online serial],

*8*(1). Retrieved from <http://www.ncolr.org/jiol/issues/viewarticle.cfm?volID=8&IssueID=25&ArticleID=128>.

Hur, J. & Brush, T. (2009). Teacher participation in online

communities: Why do teachers want to participate in self-

generated online communities of K-12 teachers? *Journal of*

*Research on Technology in Education*, *41*(3), 279-303.

Kale, U., Brush, T., & Saye, J. (2009). Assessing teachers thinking and

participation online. *Journal of Educational Computing Research,*

*41*(3), 287-317.

Saye, J., Kohlmeier, J., Brush, T., Mitchell, L., & Farmer, C. (2009).

Using mentoring to develop professional teaching knowledge for

problem-based historical inquiry. *Theory and Research in Social*

*Education, 37*(1), 6-41.

Brush, T. & Saye, J. (2008). The effects of multimedia-supported

problem-based inquiry on student engagement, empathy, and

assumptions about history. *Interdisciplinary Journal of Problem-*

*Based Learning*, *2*(1), 21-56.

Brush, T., Glazewski, K., & Hew, K. (2008). Development of an

instrument to measure pre-service teachers’ technology skills,

technology beliefs, and technology barriers. *Computers in the*

*Schools*, *25* (1-2), 112-125.

So, H. & Brush, T. (2008). Student perceptions of collaborative

learning, social presence, and satisfaction in a blended learning

environment: Relationships and critical factors. *Computers &*

*Education, 51*, 318-336.

Hew, K. & Brush, T. (2007). Integrating technology into K-12

teaching and learning: Current knowledge gaps and

recommendations for future research. *Educational Technology*

*Research and Development, 55*(3), 223-252.

Saye, J. & Brush, T. (2007). Using technology-enhanced learning

environments to support problem-based historical inquiry in

secondary school classrooms. *Theory and Research in Social*

*Education, 35*(2), 196-230.

Cullen, T., Brush, T., Frey, T., Hinshaw, R., & Warren, S. (2006).

NCLB technology and a rural school: A case study. *The Rural*

*Educator, 28*(1), 9-16.

Saye, J. & Brush, T. (2006). Comparing teachers’ strategies for

supporting student inquiry in a problem-based multimedia-

enhanced history unit. *Theory and Research in Social Education,*

*34*(2), 183-212.

Hur, J., Tan, A., Brush, T., Saye, J., & Chen, L. (2005). Redesigning

the Persistent Issues in History (PIHNet) online forum and journal

to promote interaction and reflection. *TechTrends, 49*(6), 63-66.

Saye, J.W. & Brush, T. (2005). The persistent issues in history

network: Using technology to support historical inquiry and civic

reasoning. *Social Education, 69*(4), 168-171.

Brinkerhoff, J., Klein, J., Brush, T., & Saye, J. (2005). The effects

of advisement and small groups on learning from a multimedia

database. *International Journal of Instructional Media, 32*(4),

409-418.

Brush, T. & Saye, J. (2004). Supporting learners in technology-

enhanced student-centered learning environments. *International*

*Journal of Learning Technology, 1*(2), 191-202.

Saye, J. & Brush, T. (2004). Scaffolding problem-based teaching in a

traditional social studies classroom. *Theory and Research in Social*

*Education, 32*(3), 349-378.

Simons, K., Klein, J., & Brush, T. (2004). Instructional strategies

utilized during the implementation of a hypermedia, problem-

based learning environment: A case study. *Journal of Interactive*

*Learning Research*, *15*(3), 213-233.

Wolf, S.E., Brush, T., & Saye, J. (2003). Using an information

problem-solving model as a metacognitive scaffold for

multimedia-supported information-based problems. *Journal of*

*Research on Technology in Education, 35*(3), 321-341.

Wolf, S.E., Brush, T., & Saye, J. (2003). The Big Six information

skills as a metacognitive scaffold: A case study. *School Library*

*Media Research, 6*(1). [On-line]. Available:

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Publications\_and\_Journals/School\_Library\_Media\_Research/

Contents1/Volume\_6\_(2003)/Big\_Six\_Information\_Skills.htm.

Brush, T., Glazewski, K., Rutowski, K., Berg, K., Stromfors, C.,

Hernandez-Nest, M., Stock, L., & Sutton, J. (2003). Integrating

technology into a pre-service teacher training program. The

[PT3@ASU](mailto:PT3@ASU) project. *Educational Technology Research and*

*Development, 51*(1), 57-72.

Brush, T. & Saye, J. (2002). A summary of research exploring hard

and soft scaffolding for teachers and students using multimedia-

supported learning environments. *Journal of Interactive Online*

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history and social issues in multimedia-supported learning

environments. *Educational Technology Research and*

*Development, 50*(3), 77-96.

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technology-enhanced student-centered learning activity. *Journal of*

*Educational Multimedia and Hypermedia, 10*(4), 333-356.

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into preservice teacher education. *Journal of Computing in*

*Teacher Education, 17*(4), 16-20.

Brush, T. & Saye, J. (2000). Implementation and evaluation of a

student-centered learning unit: A case study. *Educational*

*Technology Research and Development, 48*(3), 79-100.

Brush, T. & Uden, L. (2000). Using computer-mediated

communications to enhance instructional design classes: A case

study. *International Journal of Instructional Media, 27*(2), 157-

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Brush, T. (2000). Using an ILS to help students at-risk of school

failure. *Journal of Research in Education, 10*(1), 28-31.

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a multimedia-supported learning environment. *Theory and*

*Research in Social Education, 27*(4), 472-504.

Brush, T., Armstrong, J., Barbrow, D., & Ulintz, L. (1999). Design

and delivery of Integrated Learning Systems: Their impact on

student achievement and attitudes. *Journal of Educational*

*Computing Research*, 21(4), 475-486.

Brush, T. (1999). Technology planning and implementation in public

schools: A five-state comparison. *Computers in the Schools,*

*15*(2), 11-23.

Scott, B. & Brush, T. (1998). Teaching instructional technology: A

problem-based learning approach. *Canadian Journal of*

*Educational Communications*, *27*(1), 1-18.

Brush, T. (1998). Embedding cooperative learning into the design of

Integrated Learning Systems: Rationale and guidelines.

*Educational Technology Research and Development, 46*(3), 5-18.

Brush, T. (1998). Teaching pre-service teachers to use technology in

the classroom. *Journal of Technology and Teacher Education*,

*6*(4), 243-258.

Brush, T. & Bannon, S. (1998). Characteristics of technology

leaders: A survey of school administrators in the United States.

*International Studies in Educational Administration, 26*(2), 47-

56.

Brush, T. (1997). The effects on student achievement and attitudes

when using integrated learning systems in cooperative pairs.

*Educational Technology Research and Development*, *45*(1), 51-

64.

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and time-on-task for students completing ILS activities in

cooperative pairs. *Journal of Research on Computing in*

*Education*, *30*(1), 2-17.

Knapczyk, D., Rodes, P., & Brush, T. (1994). Improving staff

development in rural communities using distance education and

communication technology.  *Rural Special Education Quarterly*,

*13*(2), 19-24.

Brush, T., Knapczyk, D., & Hubbard, L. (1994). Incorporating

technology in the field-based preparation of teachers.

*Journal of Technology and Teacher Education, 2*(1), 91-102.

Knuth, R.A. & Brush, T. (1990). Results of the Hypertext '89 design

survey. *Hypermedia, 2*, 91-107.

**BOOK** Liao, Y., Ottenbreit-Leftwich, A. & Brush, T. (2025). Integrating

**CHAPTERS** technology into K-12 education. In R. Reiser, A.Carr-Chellman,

and J. Dempsey (Eds.), *Trends and issues in instructional design*

*and technology* (5th Ed). New York: Pearson.

Uttamchandani, S., Bae, H., Feng, C., Glazewski, K., Hmelo-Silver,

C., Brush, T., Mott, B., & Lester, J. (2023). Teacher

orchestration systems supported by AI: Theoretical possibilities

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*paradigm shifts in research, education, and technology.*

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**PROJECTS** *Education*. (2024 – 2025). Proposal funded by the Indiana

Department of Education, One year grant, approximately

$481,000. **Co-project director**.

*Designing for Impact: Next Level Computer Science*. (2023 – 2024).

Proposal funded by the Indiana Department of Education, One year

grant, approximately $312,000. **Co-project director**.

*Integrating AI learning into middle school science through natural*

*language processing.* (2022 – 2025). Proposal funded by the

National Science Foundation. Three year grant, approximately

$380,000. **Co-principal investigator**.

*Supporting early learning of computational thinking using mixed*

*reality technology*. (2021 – 2024). Proposal funded by the National

Science Foundation. Three year grant, approximately $725,000.

**Co-principal investigator**.

*National computer science education preservice case studies.*

(2019 – 2021). Proposal funded by the Google Foundation. One

year grant, approximately $140,000. **Co-principal investigator**.

*Augmented cognition for teaching: Transforming teacher work with*

*intelligent cognitive assistants*. (2018 –2023). Proposal funded by

the National Science Foundation. Three year grant, approximately

$1.5 million. **Co-principal investigator**.

*Examining the impact of socially relevant problem-based learning*

*curriculum at the elementary level: Students’ CS interest/*

*knowledge and teachers’ implementation needs*. (2018 – 2020).

Proposal funded by the Google Foundation. One year grant,

approximately $100,000. **Co-principal investigator**.

*The Mendel Sherman Video Case Database*. (2014 - ). Proposal

funded by the estate of the late Dr. Mendel Sherman. Ongoing

award, approximately $550,000. **Project director**.

*Wise practice cases to support complex information problem-solving*.

(2015 - 2018). Proposal funded by private donor. Ongoing award,

approximately $40,000. **Co-project director**.

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Proposal funded by the Office of the Vice-Provost for Research,

Indiana University. One year grant, approximately $25,000. **Co-**

**project director**.

*PBL-Tech: Using Web 2.0 Resources to Support Problem-Based*

*Curricular Innovations in Pre-Service Teacher Education*. (2010 –

2014).Proposal funded by the Fund for the Improvement of

Postsecondary Education (FIPSE). Three year grant,

approximately $750,000. **Project director**.

*Evaluation of Indiana’s Enhancing Education Through Technology*

*(EETT) Program*. (2010 – 2011). Proposal funded by the Indiana

Department of Education. One year contract, approximately

$325,000. **Principal investigator*.***

*Conexiones: Fostering technology-enhanced socioscientific inquiry in*

*graduate teacher preparation*. (2010 – 2011). Proposal funded by

the Fund for the Improvement of Postsecondary Education

(FIPSE). Two year grant, approximately $200,000. **Project**

**evaluator**.

*Plowing Freedom’s Ground*. (2009 – 2012). Proposal funded by the

United States Department of Education, Teaching American

History grant competition. Five year grant, approximately $1.7

million. **Co-project director**.

*Leveraging Technology to Keep America Competitive*. (2007 – 2009).

Proposal funded by the United States Department of Education.

Two year contract, approximately $3,000,000. **Co-task leader**.

*The Persistent Issues in History Laboratory for Virtual Field*

*Experience*. (2004 – 2007). Proposal funded by the Fund for the

Improvement of Post-Secondary Education (FIPSE). Three-year

grant, approximately $550,000. **Principal investigator**.

*Researching the Persistent Issues in History Network*. (Summer,

2004). Proposal funded by the Proffitt Internal Research Grant

Competition, Indiana University. Summer fellowship,

approximately $10,000. **Principal investigator**.

*Scaffolding disciplined inquiry about history and social issues in*

*multimedia-supported learning environments*. (2003 – 2004).

Proposal funded by the Proffitt Internal Research Grant

Competition, Indiana University. Two-year grant, approximately

$40,000. **Principal investigator**.

*Reasoning about critical issues of the Civil Rights Movement*. (2002 –

2004). Proposal funded by the National Endowment for the

Humanities. Two-year grant, approximately $230,000. **Co-**

**principal investigator**.

*A field-based model for integrating technology into preservice*

*teacher education*. (2000 – 2003). Proposal funded by the US

Department of Education, Preparing Tomorrow’s Teachers to Use

Technology competition. Three-year grant, approximately

$1,150,000. **Principal investigator**.

*Video cases of ISTE NETS standards*. (2001 – 2004). Proposal

funded by the US Department of Education, Preparing

Tomorrow’s Teachers to Use Technology competition. Three-year

grant, approximately $1,800,000. **Co-principal investigator**.

*Learning anytime, anywhere partnership*. (1999 - 2003). Proposal

funded by the Fund for the Improvement of Post-Secondary

Education. Four-year grant, approximately $4,000,000. **Co-**

**principal investigator**.

*Arizona Teacher Excellence Coalition (AzTEC).* (1999 – 2004).

Proposal funded by the US Department of Education, Title II

competition. Five-year grant, approximately $15,000,000. **Co-**

**principal investigator**.

*Daniel F. Breeden endowment for faculty enhancement and*

*competitive teaching grant-in-aid*. (1996). Proposal funded by

Auburn University. One-year grant, approximately $10,000.

**Principal investigator**.

**INVITED** Brush, T., Glazewski, K., Kwon, K., Ottenbreit-Leftwich, A., Shin, S.,

**SESSIONS/PAPERS** Bae, H., Seo, M., Kadirova, D., Hmelo-Silver, C., Lester, J., &

**AND KEYNOTES** Mott, B. (2023, October). *The use of multimedia technologies to*

*support student-centered teaching practices*. Invited panel

discussion at the Association for Educational Communication and

Technology Conference, Orlando, FL.

Leary, H., Measom, E., Glazewski, K., Kopcha, TJ, Brush, T., &

Ottenbreit-Leftwich, A. (2023, October). *Using research-practice*

*partnerships for collaborative research for change in education*.

Invited panel discussion at the Association for Educational

Communication and Technology Conference, Orlando, FL.

Brush, T., Glazewski, K., Ottenbreit-Leftwich, A., Callison, M., Shin,

S. (2015, November). *Cultivating university-school partnerships to*

*support research and practice: The Jacobs Educator Program*.

Invited panel discussion at the Association for Educational

Communication and Technology Conference, Indianapolis, IN.

Brush, T. Glazewski, K., Ertmer, P., Belland, B., Ottenbreit-Leftwich,

A., & Leary, H. (2012, October). *Problem-based learning and*

*teacher education*. Invited panel discussion at the Association for

Educational Communication and Technology Conference,

Louisville, KY.

Perichitte, K., Herring, M., Smaldino, S., & Brush, T. (2012, October).

*Teacher education programs under attack! A panel of teacher*

*education administrators and experts discussing their curriculum*

*changes*. Invited panel discussion at the Association for

Educational Communication and Technology Conference,

Louisville, KY.

Kopcha, T., Ottenbreit-Leftwich, A., Brush, T., and others. (2012,

October). *Crafting a dossier that effectively represents yourself*

*and your scholarship*. Invited panel discussion at the Association

for Educational Communication and Technology Conference,

Louisville, KY.

Brush, T., Glazewski, K., Hennessey, M., Martin, J., Saye, J., &

Sherwood, R. (2011, April). *Successful grantmanship in*

*instructional technology: A panel discussion*. Invited session at the

annual meeting of the American Educational Research

Association, New Orleans, LA.

Brush, T. & Klein, J. (2010, April). *Expert roundtable: Job searching*

*and professional development*. Invited session at the annual

meeting of the American Educational Research Association,

Denver, CO.

Brush, T. & Ottenbreit-Leftwich, A. (2009, April). *Expert roundtable:*

*Technology and Teacher Education*. Invited session at the annual

meeting of the American Educational Research Association,

San Diego, CA.

Brush, T. (2008, November). *Panel discussion on management of*

*educational software development: Strategies for different*

*educational audiences*. Presentation at the annual conference of the

Association for Educational Communications and Technology,

Orlando, FL.

Saye, J., Hess, D., Parker, W., Brush, T., & Maddox, L. (2008,

November). *Envisioning powerful social studies teaching: PIH*

*wise practice videocases*. Presentation at the annual meeting of the

College and University Faculty Assembly, National Council for

the Social Studies, Houston, TX.

Brush, T. & Ottenbreit-Leftwich, A. (2008, March). *SITE forum*

*discussion: A U.S. Department of Education national study of*

*preservice technology integration programs*. Paper presented at the

2008 Society for Information Technology and Teacher Education

conference, Las Vegas, NV.

Black, L. & Brush, T. (2007, March). *Opening the lid to*

*KnowledgeBox: Increasing student achievement and teacher*

*enthusiasm*. Paper presented at the 2007 Pearson Digital Learning

User’s Conference, Orlando, FL.

Brush, T. (2005, April). *Integrating problem-based learning into*

*secondary social studies: The Persistent Issues in History Network*.

Keynote address for the Problem-Based Learning SIG, American

Educational Research Association, Montreal, Canada.

Brush, T. (2004, November). *Problem-based learning: What is it?*

*Why do it?* Keynote address for the annual Tech-Know-Build

Seminar Program, Crawfordsville, IN.

Saye, J. & Brush, T. (2003, May). *Promoting civic competence*

*through problem-based history learning environments*. Paper

presented at the Third Annual Freeman Butts Institute on Civic

Learning in Teacher Education, Indianapolis, IN.

**CONFERENCE** Brush, T., Kwon, K., Shin, S., Seo, M., & Kim, H. (2024, October). **PAPERS AND** *Redesign of the Wise Practice Case Database: Multimedia*

**PRESENTATIONS** *resources to support inquiry-based teaching practices*. Paper

presented at the annual meeting of the Association for Educational

Communications and Technology, Kansas City, MO.

Kadirova, D., Leftwich, A., Brush, T., Kwon, K., Hmelo-Silver, C.,

Drumm, S., & Chu, L. (2024, October). *Elementary preservice*

*teachers’ conceptions of computer science education and*

*preparedness to teach computer science*. Paper presented at the annual meeting of the Association for Educational

Communications and Technology, Kansas City, MO.

Seo, M., Kwon, K., Brush, T., Kim, H., & Kim, K. (2024, October).

*Integrating**augmented reality and collaborative activities to*

*enhance computational thinking in K-12 classrooms*. Paper

presented at the annual meeting of the Association for Educational

Communications and Technology, Kansas City, MO.

Feng, C., Bae., H., Hong, D. Glazewski, K., Hmelo-Silver, C., Zou,

X., Wang, T., Brush, T., Lee, S., Mott, B., & Lester, J. (2024,

June). *An investigation of dashboard in collaborative inquiry: The*

*dynamic interplay between technology and pedagogy in classroom*

*orchestration*. Paper presented at the annual meeting of the

International Society of the Learning Sciences, Buffalo, NY.

Bae, H., Glazewski, K., Hmelo-Silver, C., Brush, T., Mott, B., &

Lester, J. (2024, April). *Designing orchestration assistants:*

*Examining orchestration practices in elementary, middle, and*

*high school PBL (Problem-Based Learning) classrooms*. Paper

presented at the annual meeting of the American Educational

Research Association, Philadelphia, PA.

Zhou, C., Kwon, K., Kim, K., Brush, T., Muralidharan, A., Seo, M.,

Kim, Y., & Hwang, J. (2023, October). *Embodied programming*

*experiences in computational thinking development: Examination*

*of effectiveness of augmented reality and bee-bots*. Paper presented

at the annual meeting of the Association for Educational

Communications and Technology, Orlando, FL.

Slamet, T., Brush, T., & Kwon, K. (2023, October). *The effects of*

*competition in gamified online discussions on learners’ behavioral*

*and cognitive engagement*. Paper presented at the annual meeting

of the Association for Educational Communications and

Technology, Orlando, FL.

Seo, M., Kim, K., Zhou, C., Sridhar, A., Kwon, K., Brush, T., Kim, Y.,

& Hwang, J. (2023, October). *Designing pathfinding tasks for*

*young students in augmented reality for computational thinking*.

Paper presented at the annual meeting of the Association for

Educational Communications and Technology, Orlando, FL.

Feng, C., Bae, H., Glazewski, K., Hmelo-Silver, C., Brush, T., Mott,

B., & Lester, J. (2023, October). *Exploring participation patterns*

*in problem-based learning through an epistemic lens*. Paper

presented at the annual meeting of the Association for Educational

Communications and Technology, Orlando, FL.

Feng, C., Bae, H., Chen, Y., Uttamchandani, S., Wang, T., Hong, D.,

Glazewski, K., Hmelo-Silver, C., Brush, T., Lee, S., Mott, B.,

Lester, J. (2023, April). *Rethinking troubleshooting: Transforming*

*technology troubleshooting into critical facilitation moments in*

*problem-based learning implementation*. Paper presented at the

annual meeting of the American Educational Research

Association, Chicago, IL.

Bae, H., Glazewski, K., Hmelo-Silver, C., & Brush, T. (2023, April).

*Scaffolding problem-based learning: Expert teacher strategies*

*differ across grade levels*. Paper presented at the annual meeting of

the Association for Educational Communications and Technology,

Orlando, FL.

Zhou, C., Kim, K., Kwon, K.., Brush, T., and others. (2022, October).

*Promoting young students’ embodied interaction with cutting-edge*

*technologies in computational tasks*. Paper presented at the annual

meeting of the Association for Educational Communications and

Technology, Las Vegas, NV.

Bae, H., Glazewski, K., Brush, T., & Hmelo-Silver, C. (2022,

October). *Exploring orchestration practices and orchestration*

*load in elementary, middle, and high school PBL classrooms.*

Paper presented at the annual meeting of the Association for

Educational Communications and Technology, Las Vegas, NV.

Kim, J. Lee, H., Koressel, J., Chu, L., Ottenbreit-Leftwich, A., Brush,

T., and others. (2022, October). *How to prepare elementary*

*preservice teachers to teach CS: Multiple case studies.* Paper

presented at the annual meeting of the Association for Educational

Communications and Technology, Las Vegas, NV.

Feng, C., Saleh, A., Bae, H., Glazewski, K., Hmelo-Silver, C.,

Brush, T., Fahid, F. M., Acosta, H., Lee, S., Carpenter, D., Mott,

B. & Lester, J. (2022). Multimodal behavioral disengagement

detection for collaborative game-based learning. In *Proceedings of*

*the International Conference on Artificial Intelligence in*

*Education*. 218-221.

Uttamchandani, S., Saleh, A., Bae, H., Glazewski, K., Hmelo-Silver,

C. E.,  Brush, T., Mott, B. W., & Lester, J. (2022, June). Human-

centered automation and deliberately limited labels as design

principles of ambitious learning practices. In *Proceedings of International Conference of the Learning Sciences (ICLS).* 525-532.

Feng, C., Saleh, A., Bae, H., Glazewski, K., Hmelo-Silver, C., Brush,

T., Mott, B., & Lester, J. (2021, November). *Exploring strategies*

*to redirect disruptive talk in middle-school collaborative inquiry*

*discourse.* Paper presented at the annual meeting of the

Association for Educational Communications and Technology,

Chicago, IL.

Ottenbreit-Leftwich, A., Brush, T., Childs, J., Kim, J., Koressel, J.,

Lee, H., DeLyser, L., & Yadav, A. (2021, November). *How are we*

*preparing our preservice teachers to teach CS? A National*

*perspective*. Paper presented at the annual meeting of the

Association for Educational Communications and Technology,

Chicago, IL.

Buggs, C., Uttamchandani, S., Glazewski, K., Hmelo-Silver, C.,

Brush, T., Mott, B., & Lester, J. (2021, November). *Teacher goals*

*and supported orchestration through intelligent-augmented*

*dashboard support*. Paper presented at the annual meeting of the

Association for Educational Communications and Technology,

Chicago, IL.

Bae, H., Saleh, A., Feng, C., Glazewski, K., Hmelo-Silver, C.,

Brush, T., Mott, B., & Lester, J. (2021, November). *“just vote*

*yes.\*sigh\*”: Facilitating scientific discussion in a collaborative*

*problem and game-based learning environment*. Paper presented at

the annual meeting of the Association for Educational

Communications and Technology, Chicago, IL.

Brush, T., Ottenbreit-Leftwich, A., & Kwon, K. (2021, August).

*Implementing a problem-based computer science curriculum with*

*elementary students: Impact on knowledge, skills, and attitudes.*

Paper presented at the 2021 Pan-PBL conference, Aalborg,

Denmark (conference moved to virtual format).

Brush, T. Glazewski, K., Kwon, K., & Ottenbreit-Leftwich, A. (2021,

August). *Supporting PBL practice in K-12 education: The Wise*

*Practice Video Case Database*. Paper presented at the 2021 Pan-

PBL conference, Aalborg, Denmark (conference moved to virtual

format).

Glazewski, K., Brush, T., Banks, T., Wallace, S., Hmelo-Silver, C.,

Mott, B., & Lester, J. (2021, August*). From physical to the virtual*

*and everything in-between: Local implementations and*

*adaptations of PBL in a multi-year middle school/university*

*partnership*. Paper presented at the 2021 Pan-PBL conference,

Aalborg, Denmark (conference moved to virtual format).

Guo, M., Yan, G., Kim, J., Jeon, M., Kwon, K., Leftwich, A., &

Brush, T. (2021, April). *Coding patterns and techniques in sixth-*

*graders’ block based programming projects*. Paper presented at the

annual meeting of the American Educational Research Association

(conference moved to virtual format).

Bae, H., Chen, Y., Saleh, A., Glazewski, K., Hmelo-Silver, C., Brush,

T., Lee., S., Mott, B., & Lester, J. (2021, April). *"How big is a*

*tilapia?" Negotiating collaborative inquiry in a game-based*

*learning environment*. Paper presented at the annual meeting of the

American Educational Research Association (conference moved to

virtual format).

Rodgers, K., Feng, C., Bhimdiwala, A., Gok, S., Glazewski, K.,

Hmelo-Silver, C., Brush, T., Lee, S., Mott, B., & Lester, J. (2020,

November). *Supporting teacher orchestration of collaborative*

*inquiry in game-based learning with intelligent assistants.* Paper

presented at the annual meeting of the Association for Educational

Communications and Technology, Jacksonville, FL (conference

moved to virtual format).

Bae, H., Saleh, A., Feng, C., Glazewski, K., Hmelo-Silver, C., Chen,

Y., Scribner, A., Brush, T., Mott, B., Lee, S., & Lester, J. (2020,

June). *Designing intelligent cognitive assistants with teachers to*

*support classroom orchestration of collaborative inquiry*. Paper

presented at the annual conference of the International Society of

the Learning Sciences, Nashville, TN (conference moved to virtual

format).

Kwon, K., Ottenbreit-Leftwich, A., Brush, T., & Jeon, M. (2020,

April). *Effects of problem-based learning curriculum for computer*

*science education in an elementary school*. AERA Annual

Meeting, San Francisco, CA (Conference canceled).

Ottenbreit-Leftwich, A., Kwon, K., & Brush, T. (2020, April).

*Teaching computational thinking with socially relevant problems*

*at the elementary level*. AERA Annual Meeting, San Francisco,

CA (Conference canceled).

Kwon, K., Ottenbreit-Leftwich, A., Brush, T., Jeon, M., Zhu, M., &

Gok, F. (2019, October). *Exploring 6th-grade students’ CT*

*concepts and practices.* Paper presented at the annual meeting of

the Association for Educational Communications and Technology,

Las Vegas, NV.

Ottenbreit-Leftwich, A., Brush, T., Kwon, K., Karlin, M., and others.

(2019, October). *Inspiring the next generation of learners: Using*

*socially relevant computer science (CS) problem-based learning*

*curriculum at the 6th grade level*. Paper presented at the annual

meeting of the Association for Educational Communications and

Technology, Las Vegas, NV.

Nadir, H., Glazewski, K., Brush, T., & Kwon, K. (2019, April). *When*

*middle school kids make: Understanding the roles of scaffolding*

*for troubleshooting to support inquiry*. Paper presented at the

annual meeting of the American Educational Research

Association, Toronto, Canada.

Brush, T., Ottenbreit-Leftwich, A., Kwon, K., & Karlin, M. (2019,

March*). Implementing socially relevant problem-based computer*

*science curriculum at the elementary level: Students’ computer*

*science knowledge and teachers’ implementation needs*. Paper

presented at the annual meeting of the Society for Information

Technology and Teacher Education, Las Vegas, NV.

Bae, H., Glazewski, K., Brush, T., & Kwon, K. (2018, October).

*Investigating scaffolding as social interaction: Looking closely at*

*fading through conversation analysis*. Paper presented at the

annual meeting of the Association for Educational

Communications and Technology, Kansas City, MO.

Farnsworth, K., Winters, S., Ellard, S. Berry, D., Glazewski, K., &

Brush, T. (2018, October). *Scaffolding middle school students in a*

*PBL makerspace unit: Scaffolding means versus scaffolding*

*intentions*. Paper presented at the annual meeting of the

Association for Educational Communications and Technology,

Kansas City, MO.

Nadir, H., Glazewski, K., Brush. T., & Kwon, K. (2018, October).

*Understanding a middle-school teacher’s scaffolding and*

*troubleshooting practices to support student inquiry during*

*making*. Paper presented at the annual meeting of the Association

for Educational Communications and Technology, Kansas City,

MO.

Bae, H., Glazewski, K., Brush, T., & Kwon, K. (2018, April).

*Fostering transfer of responsibility in the middle school problem-*

*based learning classroom. An investigation of dialogic scaffolds*.

Paper presented at the annual meeting of the American Educational

Research Association, New York, NY.

Brush, T., Glazewski, K., Wallace, S., & Banks, T. (2017, November).

*Making history come alive! Integrating history, ecology, and*

*makerspaces*. Presentation at the annual meeting of the National

Council for Social Studies, San Francisco, CA.

Brush, T., Glazewski, K., Shin, S., & Shin, S. (2017, November).

*Implementation of a socioscientific inquiry unit in high school*

*biology: Results of a multi-year design project*. Paper presented at

the annual meeting of the Association for Educational

Communications and Technology, Jacksonville, FL.

Karlin, M., Bae, H., Aslaif, M., Basdogan, M., Edelberg, T.,

Nadiruzzaman, H., Sari, A., Zhu, M., Brush, T., & Glazewski, K.

(2017, May). Examining reflective thinking in middle school

design problem-solving in a maker environment. Paper presented

at the annual meeting of the American Educational Research

Association, San Antonio, TX.

Shin, S. & Brush, T. (2017, April). *Promoting preservice teacher*

*reflection: Implementation of classroom video cases in a teaching*

*methods course.* Paper presented at the annual meeting of the

American Educational Research Association, San Antonio, TX.

Glazewski, K., Gomoll, A., Hmelo-Silver, C., Brush, T., & Jung, J.

(2017, April). *“We are a nonlinear dynamic system”: Problem-*

*based design in engineering at a Hispanic-serving institution*.

Paper presented at the annual meeting of the American Educational

Research Association, San Antonio, TX.

Alangari, H., Brush, T., & Boling, E. (2017, April). *Factors*

*contributing to the use of technology for Saudi female K-12 ESL*

*teachers*. Paper presented at the annual meeting of the American

Educational Research Association, San Antonio, TX.

Shin, S., Brush, T., & Glazewski, K. (2017, April). *Peer scaffolding*

*patterns in inquiry-based collaborative learning tasks supported*

*by mobile devices*. Paper presented at the annual meeting of the

American Educational Research Association, San Antonio, TX.

Shin, S., Brush, T., & Glazewski, K. (2016, October). *Identifying peer*

*scaffolding types and interaction patterns in inquiry-based*

*learning*. Paper presented at the annual meeting of the Association

for Educational Communication and Technology, Las Vegas, NV.

Shin, S., & Brush, T. (2016, October). *Promoting reflective practice in*

*teacher education: Technology-enhanced case-based instruction*.

Paper presented at the annual meeting of the Association for

Educational Communication and Technology, Las Vegas, NV.

Brush, T., Glazewski, K., & Saye., J. (2016, June). *The PBL-Tech*

*project: Web 2.0 tools and resources to support PBL in teacher*

*education*. Paper presented at the 2016 PBL Congress, Zurich,

Switzerland.

Glazewski, K., Brush, T., Shin, S., & Shin, S. (2016, June).

*Implementing socioscientific inquiry in high school biology:*

*Teacher and student perspectives*. Paper presented at the 2016 PBL

Congress, Zurich, Switzerland.

Gomoll, A., Glazewski, K., Brush, T., Hmelo-Silver, C., & Jung, J.

(2016, June). *What do instructors want other instructors to know?*

*Making experiences usable through PBL Virtual Case Laboratory*

*(VCL)*. Paper presented at the 2016 PBL Congress, Zurich,

Switzerland.

Ergulec, F., Brush, T., Glazewski, K., Shin, S., Shin, S., Hogaboam,

P., & Guo, M. (2016, April*). Teacher scaffolding strategies*

*for socioscientific inquiry-based learning in a high school biology*

*classroom*. Paper presented at the annual meeting of the American

Educational Research Association, Washington, DC.

Ergulec, F., Brush, T., Glazewski, K., Shin, S., Shin, S., Hogaboam,

P., & Guo, M. (2016, March). *Teacher scaffolding for inquiry-*

*based learning in a technology-enhanced student-centered high*

*school biology classroom: A case study*. Paper presented at the

annual meeting of the Society for Information Technology and

Teacher Education, Savannah, GA.

Brush, T., Glazewski, K., Shin, S., & Shin, S. (2016, March). *The*

*effects of technology-supported socioscientific inquiry (SSI) on*

*student achievement and attitudes towards science*. Paper

presented at the annual meeting of the Society for Information

Technology and Teacher Education, Savannah, GA.

Brush, T., Glazewski, K., Shin, S., Shin, S., Saye, J., & Zhang, Z.

(2016, March). *The Mendel Sherman wise practice video case*

*database*. Paper presented at the annual meeting of the Society for

Information Technology and Teacher Education, Savannah, GA.

Shin, S., Brush, T., & Saye, J. (2015, November). *Integrating*

*technology-enhanced cases in a secondary social studies methods*

*course: A three-semester long experience of a teacher educator*.

Presented at the annual meeting of the College and University

Faculty Assembly of the National Council for the Social Studies,

New Orleans, LA.

McCormick, T., Morowski, D., & Brush, T. (2015, November).

*Elementary methods professors, don’t throw in the towel!*

Presented at the annual meeting of the College and University

Faculty Assembly of the National Council for the Social Studies,

New Orleans, LA.

Shin, S., Brush, T., & Saye, J. (2015, November). *Integrating*

*technology-enhanced cases into a teaching methods course: A*

*teacher educator’s perspective*. Paper presented at the annual

meeting of the Association for Educational Communication and

Technology, Indianapolis, IN.

Shin, S., Shin, S., Brush, T., & Glazewski, K. (2015, November).

*Identifying the relationship between group communication*

*behavior and student learning style in collaborative learning: A*

*case of inquiry-based learning classrooms*. Paper presented at the

annual meeting of the Association for Educational Communication

and Technology, Indianapolis, IN.

Shin, S., Brush, T., & Glazewski, K. (2015, November). *An analysis*

*of scaffolding patterns in a technology-enhanced inquiry-based*

*classroom*. Paper presented at the annual meeting of the

Association for Educational Communication and Technology,

Indianapolis, IN.

Liao, Y., Ottenbreit-Leftwich, A., Glazewski, K., Brush, T., & Karlin,

M. (2015, November). *Supporting change in teacher practice:*

*Examining teachers’ professional development for technology*

*integration*. Paper presented at the annual meeting of the

Association for Educational Communication and Technology,

Indianapolis, IN.

Anderson, G. & Brush, T. (2015, November). *Emerging perspectives*

*in multimedia use for learning*. Paper presented at the annual

meeting of the Association for Educational Communication and

Technology, Indianapolis, IN.

Edelberg, T. & Brush. T. (2015, November). *Characteristics of*

*technology leaders 2.0: A survey of school administrators and*

*teachers in Indiana*. Paper presented at the annual meeting of the

Association for Educational Communication and Technology,

Indianapolis, IN.

Shin, S., Brush, T., Jung, J., Glazewski, K., Shin, S., Ergulec, F.,

Hogaboam, P., & Gensic, J. (2015, April). *Towards designing and*

*implementing socioscientific inquiry: Scaffolding students’*

*inquiry-based learning*. Paper presented at the Annual Meeting of

the American Educational Research Association, Chicago, IL.

Kohlmeier, J., Saye, J., Howell, J., McCormick, T., Jones, R., &

Brush, T. (2015, April). *Promoting problem-based historical*

*inquiry through scaffolded lesson study*. Paper presented at the

Annual Meeting of the American Educational Research

Association, Chicago, IL.

Gensic, J., Shin, S., Jung, J., Glazewski, K., & Brush, T. (2015,

March*). Improve student argumentation and engagement with*

*socio-scientific inquiry*. Presented at the annual meeting of the

National Science Teachers Association, Chicago, IL.

Kohlmeier, J., Saye, J., McCormick, T. Howell, J., Jones, C. & Brush,

T. (2014, November). *Promoting professional teaching knowledge*

*with scaffolded lesson study*. Presented at the annual meeting of the

College and University Faculty Assembly of the National Council

for the Social Studies, Boston, MA.

Shin, S. & Brush, T. (2014, November). *Designing case-based*

*learning experiences for pre-service teachers in a teaching*

*methods course*. Paper presented at the annual meeting of the

Association for Educational Communication and Technology,

Jacksonville, FL.

Shin, S., Brush, T., Jung, J., & Glazewski, K. (2014, November).

*Scaffolding 8th graders’ socioscientific inquiry in technology-*

*enhanced classrooms: Towards designing and implementing*

*distributed scaffolding*. Paper presented at the annual meeting of

the Association for Educational Communication and Technology,

Jacksonville, FL.

Brush, T., Glazewski, K., Shin, S., Shin, S., Jung, J., & Hogaboam, P.

(2014, November). *Iterative implementation of socioscientific*

*inquiry in high school biology: A teacher’s perspective*. Paper

presented at the annual meeting of the Association for Educational

Communication and Technology, Jacksonville, FL.

Shin, S. & Brush, T. (2014, November). *Supplementing field-based*

*experiences through the use of technology-enhanced cases*. Paper

presented at the annual meeting of the Association for Educational

Communication and Technology, Jacksonville, FL.

Brush, T., Glazewski, K., Shin, S., Shin, S., & Jung, J. (2014, April).

*Implementation of a socioscientific inquiry unit in a high school*

*biology classroom: A teacher’s perspective*. Paper presented at the

Annual Meeting of the American Educational Research

Association, Philadelphia, PA.

Glazewski, K., Brush, T., Jung, J., Shin, S., & Shin, S. (2014, April).

*SSI-Net: Design, development, and practice of web- and mobile-*

*based tools to scaffold socioscientific inquiry*. Paper presented at

the Annual Meeting of the American Educational Research

Association, Philadelphia, PA.

Shen, Y. & Brush, T. (2014, April). *Digital-native preservice*

*teachers’ technology skills, technology beliefs, and perceived*

*technology barriers*. Paper presented at the Annual Meeting of the

American Educational Research Association, Philadelphia, PA.

Shin, S. & Brush, T. (2014, April). *A case study of implementing*

*technology-enhanced cases in a social studies methods course*.

Paper presented at the Annual Meeting of the American

Educational Research Association, Philadelphia, PA.

Shin, S., Brush, T., Jung, J., Glazewski, K., & Shin, S. (2014, April).

*Implementing scaffolding for socioscientific inquiry in the*

*secondary science classroom: A case study*. Paper presented at the

Annual Meeting of the American Educational Research

Association, Philadelphia, PA.

Saye, J., Kohlmeier, J., McCormick, T., Howell, J., Jones, R.,

Shannon, D., & Brush. T. (2013, November). *Scaffolded lesson*

*study: Promoting professional teaching knowledge for problem-*

*based historical inquiry*. Paper presented at the annual meeting of

the College and University Faculty Assembly of the National

Council for Social Studies, St. Louis, MO.

Shin, S., Brush, T., & Saye, J. (2013, November). *Social studies*

*teacher educators’ use of hypermedia-enhanced cases in teacher*

*education programs*. Paper presented at the annual meeting of the

College and University Faculty Assembly of the National Council

for Social Studies, St. Louis, MO.

Brush, T., Glazewski, K., Ottenbreit-Leftwich, A., Shin, S., Jung, J.,

Shin, S., Saye, J., Kohlmeier, J., & Howell, J. (2013, October).

*The PBL-Tech project: Web 2.0 tools to support problem-based*

*learning in science and social studies*. Paper presented at the

annual meeting of the Association for Educational Communication

and Technology, Anaheim, CA.

Shin, S. & Brush, T. (2013, October). *Preparing preservice teachers*

*for meaningful teaching and learning using a hypermedia-*

*enhanced case-based learning approach*. Paper presented at the

annual meeting of the Association for Educational Communication

and Technology, Anaheim, CA.

Uzan, M., Uzan, E., Glazewski, K., & Brush, T. (2013, October). *Use*

*of mobile devices to foster inquiry-based learning: A case of*

*exemplary teachers*. Paper presented at the annual meeting of the

Association for Educational Communication and Technology,

Anaheim, CA.

Jung, J., Shin, S., Lu, Y., Glazewski, K., & Brush, T. (2013, October*).*

*A collaborative curriculum design project: Major events, roles,*

*and issues*. Paper presented at the annual meeting of the

Association for Educational Communication and Technology,

Anaheim, CA.

Hoey, B., Aslan, S., Zachmeier, A., Sadik, O., Glazewski, K.,

Leftwich, A., & Brush, T. (2013, October). *Technology*

*integration concerns: Expanding the dialogue between pre-service*

*teachers and exemplary technology-using in-service teachers*.

Paper presented at the annual meeting of the Association for

Educational Communication and Technology, Anaheim, CA.

Shin, S., Brush, T., & Saye, J. (2013, April). *Social studies teacher*

*educators’ purposes in using hypermedia-enhanced cases in*

*methods courses*. Paper presented at the Annual Meeting of the

American Educational Research Association, San Francisco, CA.

Shin, S., Brush, T., Zhang, Z., Shin, S., Kim, M., & Lu, Y. (2013,

April). *Evaluation of the new construction tools in the Persistent*

*Issues in History Network*. Paper presented at the Annual Meeting

of the American Educational Research Association, San Francisco,

CA.

Saye, J., Kohlmeier, J., McCormick, T., Howell, J., Jones, R.,

Shannon, D., & Brush, T. (2013, April). *Supporting problem-*

*based historical inquiry for elementary and secondary teachers:*

*Scaffolded lesson study*. Paper presented at the Annual Meeting of

the American Educational Research Association, San Francisco,

CA.

Brush, T., Glazewski, K., Ottenbreit-Leftwich, A., Saye, J., Zhang, Z.,

& Shin, S. (2013, March). *The PBL-Tech project: Web-based tools*

*and resources to support problem-based learning in preservice*

*teacher education*. Paper presented at the annual meeting of the

Society for Information Technology and Teacher Education, New

Orleans, LA.

Shin, S. & Brush, T. (2013, March). *“I think this is really beneficial.*

*You should do this again”: A case study of implementing authentic*

*K-12 classroom cases in a social studies methods course*. Paper

presented at the annual meeting of the Society for Information

Technology and Teacher Education, New Orleans, LA.

Jia, X., Jung, J., Huh, Y., Min, M., Shin, S., Ottenbreit-Leftwich, A.,

Glazewski, K., & Brush, T. (2012, October). *Breaking barriers for*

*technology integration in K-12 classrooms: Success stories from*

*exemplary in-service teachers*. Paper presented at the Association

for Educational Communication and Technology Conference,

Louisville, KY.

Shin, S., Kim, M., & Brush, T. (2012, October). *The redesign of the*

*Persistent Issues in History Network*. Paper presented at the

Association for Educational Communication and Technology

Conference, Louisville, KY.

Shin, S., Kim, M., & Brush, T. (2012, October). *The redesign of the*

*Wise Practice Case Database*. Paper presented at the Association

for Educational Communication and Technology Conference,

Louisville, KY.

Brush, T. & Saye, J. (2012, April). *An instructional model to support*

*problem-based historical inquiry: The Persistent Issues in History*

*Network*. Paper presented at the Annual Meeting of the American

Educational Research Association, Vancouver, BC.

Brush, T. & Ottenbreit-Leftwich, A. (2012, April). *The PBL-TECH*

*project. Using Web 2.0 tools and resources to support problem-*

*based curricular innovations in preservice teacher education*.

Paper presented at the Annual Meeting of the American

Educational Research Association, Vancouver, BC

Shin, S., Brush, T., & Saye, J. (2012, March). *Social studies teacher*

*educators’ use of the Wise Practice Case Database in teacher*

*education courses*. Paper presented at the Society for Information

Technology and Teacher Education Conference, Austin, TX.

Callahan, C., Saye, J. & Brush, T.  (2012, March). *Designing more*

*effective educative curriculum materials for the social studies*.

Paper presented at the Society for Information Technology and

Teacher Education Conference. Austin, TX.

Callahan, C, Saye, J. & Brush, T. (2011, December). *Designing more*

*effective educative curriculum materials for the social studies.*

Paper presented at the annual meeting of the College and

University Faculty Assembly of the National Council for the

Social Studies. Washington, DC.

Gronseth, S. & Brush, T. (2011, April). Expanding opportunities for

secondary students with mild disabilities: A national study of

assistive technology use. Paper presented at the annual meeting of

the American Educational Research Association, New Orleans,

LA.

Ottenbreit-Leftwich, A., & Brush, T. (2011, March). *Comparing how*

*teachers use technology and teacher education programs prepare*

*teachers to use technology*. Paper presented at the Society for

Information Technology & Teacher Education International

Conference, Nashville, TN.

Brush, T., Ottenbreit-Leftwich, A., Saye, J., Glazewski, K.,

McCormick, T. (2011, March). *PBL-TECH: Using web 2.0*

*tools and resources to support problem-based curricular*

*innovations in pre-service teacher education*. Paper presented at

the Society for Information Technology & Teacher Education

International Conference, Nashville, TN.

Brush, T. & Saye, J. (2010, November*). Using digital resources to*

*facilitate professional practice and community among elementary*

*social studies teacher educators*. Paper presented at the College

and University Faculty Assembly of the National Council for

Social Studies, Denver, CO.

Ottenbreit-Leftwich, A.T., & Brush, T.A. (2010, October).

*Comparison of technology topics and experiences: A national*

*study of teacher education programs and K-12 teachers*. Paper

presented at Association for Educational Communications and

Technology International Convention, Anaheim, CA.

Roman, T.A., Ottenbreit-Leftwich, A.T., Brush, T.A., & TeachTech

(2010, October). *How Elementary and Secondary Teachers Use*

*Technology Differently: A National Study of Accomplished*

*Technology-Using Teachers*. Paper presented at Association for

Educational Communications and Technology International

Convention, Anaheim, CA.

Strycker, J., Brush, T.A., & Ottenbreit-Leftwich. (2010, October).

*Comparing Computer Self-Efficacy and Technology Requirements*

*between Traditional and Alternative TEP Students at Four*

*Institutions*. Paper presented at Association for Educational

Communications and Technology International Convention,

Anaheim, CA.

Brush, T., Saye, J., Kohlmeier, J., Maddox, L., & Howell, J. (2010,

April). *Assessing pre-service teachers’ knowledge of implementing*

*problem-based inquiry strategies in social studies*. Paper presented

at the annual conference of the American Educational Research

Association, Denver, CO.

Saye, J., Kohlmeier, J., Howell, J., Maddox, L., & Brush, T. (2009,

November). *Assessing programmatic effects on pre-service social*

*studies teachers’ instructional decision-making*. Paper presented at

the College and University Faculty Assembly of the National

Council for Social Studies, Atlanta, GA.

Brush, T. & Ottenbreit-Leftwich, A. (2009, October). *A national study*

*comparing how teacher education programs prepare teachers to*

*use technology and how teachers use technology*. Paper presented

at the annual meeting of the Association for Educational

Communications and Technology, Louisville, KY.

Saye, J., Kohlmeier, J., Howell, J., Maddox, L., Brush, T., Wang, Y.,

& Lee-Watson, S. (2009, April). *Assessing program effectiveness*

*for promoting professional teaching knowledge about problem-*

*based historical inquiry*. Paper presented at the annual conference

of the American Educational Research Association, San Diego,

CA.

Ottenbreit-Leftwich, A., Brush, T, & Plucker, J. (2009, April).

*Technology experiences in teacher preparation: A national study*

*of teacher education programs and teachers*. Paper presented at

the annual conference of the American Educational Research

Association, San Diego, CA.

Brush, T. & Ottenbreit-Leftwich, A. (2008, November).*Supporting*

*the use of emerging technologies in schools: Research and*

*implications*. Presentation at the annual conference of the

Association for Educational Communications and Technology,

Orlando, FL.

Brush, T. & Saye, J. (2008, March). *How do preservice social studies*

*teachers implement problem-based historical inquiry strategies: A*

*scenario-based survey study*. Paper presented at the annual

conference of the American Educational Research Association,

New York, NY.

Saye, J., Kohlmeier, J., Brush, T., Maddox, L., & Howell, J. (2008,

March). *Developing a professional knowledge culture of problem-*

*based historical inquiry: Scaffolded lesson study*. Paper presented

at the annual conference of the American Educational Research

Association, New York, NY.

Hur, J. & Brush, T. (2008, March). *Reasons for participation in online*

*communities of K-12 teachers*. Paper presented at the annual

conference of the American Educational Research Association,

New York, NY.

Hur, J. & Brush, T. (2008, March). *Emotional support in online*

*communities of teachers*. Paper presented at the 2008 Society for

Information Technology and Teacher Education conference, Las

Vegas, NV.

Brush, T. & Saye, J. (2007, December). *Strategies for preparing pre-*

*service social studies teachers to effectively integrate technology:*

*Models and practices.* Paper presented at the College and

University Faculty Assembly of the National Council for Social

Studies, San Diego, CA.

Kohlmeier, J., Mitchell, L., Saye, J., & Brush, T. (2007, December).

*Meeting the challenges of issues-centered instruction with “low*

*achieving” students*. Paper presented at the College and University

Faculty Assembly of the National Council for Social Studies, San

Diego, CA.

Saye, J., Kohlmeier, J., Brush, T., Maddox, L., & Howell, J. (2007,

December). *Using lesson study to build a professional knowledge*

*community for problem-based history study*. Paper presented at the

College and University Faculty Assembly of the National Council

for Social Studies, San Diego, CA.

Kale, U., Yerasimou, T., & Brush, T. (2007, October). Can they use it

to learn? Usability testing with pre-service teachers learning

through video cases. Paper presented at the Annual Meeting of the

Association for Educational Communications and Technology,

Anaheim, CA.

Brush, T., Saye, J., Kohlmeier, J., and others. (2007, October).*The*

*Persistent Issues in History Laboratory for Virtual Field*

*Experience (PIH-LVFE)*. Demonstration/presentation at the first

annual Design and Development Showcase at the Annual Meeting

of the Association for Educational Communications and

Technology, Anaheim, CA.

Brush, T., Saye, J., and others. (2007, April). *Evaluating the Persistent*

*Issues in History Laboratory for Virtual Field Experience (PIH-*

*LVFE)*. Paper presented at the Annual Meeting of the American

Educational Research Association, Chicago, IL.

Cullen, T. & Brush, T. (2007, April). *Preservice teachers’ inclusion of*

*technology in their visions of their future classrooms*. Paper

presented at the Annual Meeting of the American Educational

Research Association, Chicago, IL.

Hur, J. & Brush, T. (2007, April). *From learning to implementing*

*technology: Helping preservice teachers with technology*

*integration*. Paper presented at the Annual Meeting of the

American Educational Research Association, Chicago, IL.

Stirling, D. & Brush. T. (2007, April). *The impact of open-ended,*

*computer-based courseware on student achievement and attitudes*

*in mathematics, reading, and language*. Paper presented at the

Annual Meeting of the American Educational Research

Association, Chicago, IL.

Saye, J. & Brush, T. (2006, November). *Supporting problem-based*

*historical inquiry with technology-enhanced learning*

*environments*. Paper presented at the annual meeting of the

College and University Faculty of the National Council for Social

Studies, Washington, DC.

Cullen, T. & Brush, T. (2006, October). *The use of preservice*

*teachers’ drawings of future classrooms to inform teacher*

*educators and facilitate reflection about classroom beliefs*. Paper

presented at the Annual Conference of the International Visual

Media Association, Fort Worth, TX.

Kale, U., Hur, J., Yerasimou, T., & Brush, T. (2006, June). *A model*

*for video-based virtual field experience*. Presentation at the 2006

International Conference of the Learning Sciences, Bloomington,

IN.

Brush, T. & Saye, J. (2006, April). *Scaffolding critical reasoning in*

*history and social studies: Tools to support problem-based*

*historical inquiry*. Paper presented at the annual meeting of the

American Educational Research Association, San Francisco, CA.

So, H. J., & Brush, T. (2006, April). *Student perceptions of*

*cooperative learning in a distance learning environment:*

*Relationships with social presence and satisfaction*. Paper

presented at the annual meeting of the American Educational

Research Association, San Francisco, CA.

Saye, J. & Brush, T. (2005, November). *Technology as a lever for*

*expanding investigations of the development of problem-based*

*civic inquiry*. Paper presented at the annual meeting of the College

and University Faculty of the National Council for Social Studies,

Kansas City, MO.

Brush, T., Saye, J., and the PIHNet Development Team. (2005,

October). *Modeling problem-based inquiry in social studies. The*

*Persistent Issues in History Laboratory for Virtual Field*

*Experience*. Paper presented at the annual meeting of the

Association for Educational Communications and Technology,

Orlando, FL.

Brush, T. & Saye, J. (2005, April). *The effects of multimedia-*

*supported problem-based historical inquiry on student*

*engagement, empathy, and assumptions about history*. Paper

presented at the annual meeting of the American Educational

Research Association, Montreal, Canada.

Saye, J., Kohlmeieir, J., Brush, T., Mitchell, L., & Farmer, C. (2005,

April). *Nurturing a professional community of practice for*

*promoting problem-based historical inquiry*. Paper presented at the

annual meeting of the American Educational Research

Association, Montreal, Canada.

Brush, T., Saye, J., & the PIHNet Development Team. (2005, March).

*Tools to promote problem-based inquiry in social studies: The*

*Persistent Issues in History Network*. Paper presented at the annual

meeting of the Society for Information Technology and Teacher

Education, Phoenix, AZ.

Hur, J., Brush, T., Kim, K., Tan, A., Dysard, G., Liu, X., Feng, Y.,

Kale, U., Chen, L., & Saye, J. (2005, March). *Online forum:a tool*

*that can foster teachers’ collaborative reflection*. Paper presented

at the annual meeting of the Society for Information Technology

and Teacher Education, Phoenix, AZ.

Brush, T. & Simons, K. (2004, October). *Scaffolding disciplined*

*inquiry in online learning environments*. Presentation at the annual

meeting of the Association for Educational Communications and

Technology, Chicago, IL.

Brush, T. & Saye, J. (2004, April). *The effects of multimedia-*

*supported problem-based historical inquiry on student*

*engagement, empathy, and historical reasoning*. Paper presented at

the annual meeting of the American Educational Research

Association, San Diego, CA.

Saye, J. & Brush, T. (2004, April). *Using technological affordances to*

*facilitate problem-based historical inquiry*. Paper presented at the

annual meeting of the American Educational Research

Association, San Diego, CA.

Brush, T. & Saye, J. (2004, March). *PIHNet: A web-based*

*environment for supporting student historical thinking*. Paper

presented at the annual meeting of the Society for Information

Technology and Teacher Education, Atlanta, GA.

Saye, J. & Brush, T. (2004, March). *Supporting problem-based*

*historical inquiry in the high school history classroom*. Paper

presented at the annual meeting of the Society for Information

Technology and Teacher Education, Atlanta, GA.

Saye, J. & Brush, T. (2003, November). *Supporting problem-based*

*historical inquiry in a web-based learning environment*. Paper

presented at the annual meeting of the College and University

Faculty of the National Council for Social Studies, Chicago, IL.

Brush, T. & Saye, J. (2003, October). *Decision Point!: A web-based*

*environment for supporting student historical thinking*. Paper

presented at the annual meeting of the Association for Educational

Communication and Technology, Anaheim, CA.

Brush, T., Saye, J., and others. (2003, October). *Supporting problem-*

*based historical inquiry with digital resources*. Paper presented at

the annual meeting of the Association for Educational

Communication and Technology, Anaheim, CA.

Glazewski, K., Brush, T., Sutton, J. & Ozogul, G. (2003, October).

*The impact of integrated field-based technology courses on*

*preservice teachers' beliefs and practices*. Paper presented at the

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Stromfors, C. & Brush, T. (2002, November). *Modeling technology*

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Glazewski, K., Berg, K., Sutton, J., & Brush, T. (2002, November).

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Brush, T. & Saye, J. (2001, November). *Defining hard and soft*

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Glazewski, K., Brush, T., & Klein, J. (2001, November). *The role of*

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Atlanta, GA.

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annual meeting of the Association for Educational

Communications and Technology, Atlanta, GA.

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Brush, T. & Saye, J. (2001, April). *Implementing technology-*

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TX.

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Brush, T. & Saye, J. (2000, October). *Design, implementation, and*

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Brush, T. (2000, October). *A comparison of teacher attitudes using*

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Brush, T., Saye, J., & Miller, M. (2000, February). *Utilizing open-*

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Communications and Technology Conference, Long Beach, CA.

Saye, J. & Brush, T. (1999, November). *Student reasoning with*

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Brush, T. & Saye, J. (1999, November). *Supporting problem-based*

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Presentation at the annual meeting of the National Council of

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Brush, T., Saye, J., & Miller, M. (1999, October). *Promoting*

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Brush, T. (1999, February). *Embedding cooperative learning*

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Houston, TX.

Brush, T. & Saye, J. (1999, February). *Instructional tools for*

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Bannon, S. & Brush, T. (1999, February). *Technology skills for*

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Conference, Houston, TX.

Brush, T. (1998, October). *Design and delivery of Integrated*

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*attitudes*. Paper presented at the annual meeting of the Arizona

Educational Research Organization, Mesa, AZ.

Brush, T. (1998, April). *Technology planning and implementation in*

*public schools: A five state comparison*. Paper presented at the

annual meeting of the American Educational Research

Association, San Diego, CA.

Brush, T. (1998, February). *Integrating Cooperative Learning with*

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Association, Tampa, FL.

Brush, T. (1998, February). *The Effects of Combining Adult*

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Brush, T. & Scott, B. (1998, February). *Teaching Instructional*

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Technology Conference, Saint Louis, MO.

Brush, T. & Bannon, S. (1998, February). *What do schools need*

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*five southeastern states*. Presentation at the 1997 Association for

Educational Communications and Technology Conference,

Saint Louis, MO.

Brush, T. (1997, June). *Reviewing and selecting software.*

Presentation at the 1997 Alabama Educational Technology

Conference, Birmingham, AL.

Brush, T. (1997, April). *Teaching pre-service teachers to use*

*technology in the classroom*. Paper presented at the 1997 Society

for Information Technology in Education Conference, Orlando,

FL.

Brush, T. (1997, February). *Technology leaders: What do schools*

*need?*  Paper presented at the 1997 Eastern Educational Research

Association, Hilton Head, SC.

Brush, T. (1997, February). *Planning for technology: Guidelines*

*For school districts*. Presentation at the 1997 Association for

Educational Communications and Technology Conference,

Albuquerque, NM.

Brush, T. & Bannon, S. (1997, February). *Characteristics of*

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Communications and Technology Conference, Albuquerque, NM.

Brush, T. (1996, February). *The effectiveness of cooperative*

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Educational Communications and Technology Conference,

Indianapolis, IN.

Brush, T. (1996, February). *The effects on student achievement*

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*delivered instruction.* Paper presented at the 1996 Eastern

Educational Research Association, Boston, MA.

Brush, T. & Prigge, W. (1995, October). *Bringing multimedia into*

*the* *classroom*. Presentation at the Hypermedia ‘95 Conference,

Bloomington, IN.

Brush, T. & Armstrong, J. (1995, February). *Using technology to*

*facilitate extended learning opportunities for students at-risk of*

*school failure.* Presentation at the 1995 AASA Conference,

New Orleans, LA.

Brush, T. & Refalo, M. (1994, October). *Integrating technology*

*into the curriculum.* Presentation at the 1994 NSBA

Technology and Learning Conference, Dallas, TX.

Knapczyk, D. & Brush, T. (1992, August). *Using audiographics in*

*field-based teacher training.* Presentation at the 1992

Audiographics Conference, State College, PA.

Brush, T., Knapczyk, D., & Hubbard, L. (1992, March). *Using*

*technology to facilitate field-based training of practicing*

*teachers*. Paper presented at the 1992 STATE Conference,

Houston, TX.

Brush, T. (1992, February). *Audiographic applications in*

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Washington, DC.

Knapczyk, D., & Brush, T. (1991, November). *Staff development*

*in rural schools through distance education*. Presentation at the

1991 Council for Exceptional Children Conference, “Children on

the edge.”, New Orleans, LA.

Brush, T. & Honebein, P. (1991, October). *Using hypermedia to*

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the 1991 Hypermedia conference, Ball State University, Muncie,

IN.

Knapczyk, D., Brush, T., Garfinkle, R., Glendening, J., & Rodes, P.

(1991, March). *Collaborative teacher training via distance*

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Exceptional Children Conference, Indianapolis, IN.

Brush, T. (1991, February). *Teaching students with learning*

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the 1991 Association for Educational Communications and

Technology Conference, Orlando, FL.

Brush, T., Prigge, W. & Welsh, T. (1991, February). *The* *use of*

*hypermedia to promote a new epistemology of learning.*

Presentation at the 1991 Association for Educational

Communications and Technology Conference, Orlando, FL.

Brush, T. & Knuth, R.A. (1990, October). *The use of Intermedia to*

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1990 Mid-Western Education Research Association, Chicago, IL.

**DISSERTATIONS** Gok, F. (2025). *Examining pair programming interactions and their*

*impact on middle school students’ self-efficacy and achievement in*

*a text-based programming language*. Indiana University.

Committee member.

Kim, J. (2025). *Animate your story: Exploring the impact of narrative*

*coding program on young children’s computational thinking and*

*writing skills*. Indiana University. Committee member.

Hikmatilla, U. (2024). *Intercultural pedagogy in less commonly taught*

*language classrooms: Teacher perceptions and practices*. Indiana

University. Dissertation chair.

Jantaraweragul, K. (2024). *Examining teachers’ project-based*

*learning experiences*. Indiana University. Dissertation chair.

Slamet, T. (2024). *A study of learners’ behavior, cognition, and*

*attitudes in cooperative learning utilizing gamification*. Indiana

University. Dissertation chair.

Abramenka, V. (2024). *Teaching presence and social presence in an*

*online course: A case study on the deaf student perspective*.

Indiana University. Dissertation chair.

Lee, H. (2024). *Examining the effectiveness of personalized learning*

*through artificial intelligence*. Indiana University. Dissertation

chair.

Giupponi, L. (2024). *An evaluation of an online Masters degree for*

*foreign language educators*. Indiana University. Dissertation

chair.

Harper, C. (2024). *A case study of the perceptions of faculty*

*champions in the diffusion of a technological innovation in higher*

*education*. Indiana University. Committee member.

May, T. (2024). *Supporting collaborative learning for students with*

*Autism Spectrum Disorder using a shared digital tool: A Universal*

*Design for Learning approach*. Indiana University. Dissertation

chair.

Spinda, B. (2024). *Faculty selection and use of active learning*

*techniques in didactic courses in medical laboratory science*

*education*. Indiana University. Dissertation chair.

Bailey, K. (2024). *Instruction for sustainability: How expansive*

*framing impacts behavior change*. Indiana University. Committee

member.

Dixon, K. (2024). *Teacher perceptions and professional development*

*impact on generative AI use in middle grades*. Indiana University.

Dissertation chair.

Cooper, S. (2024). *The invisible impact: Collaboration with teaching*

*faculty and instructional designers*. Indiana University.

Dissertation chair.

Marcelle, P. (2024). *Self-regulated learning in an online micro-*

*credential: An explanatory sequential mixed methods case study*.

Indiana University. Committee member.

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Farnsworth, K. (2023). *Scaffolding systems in high school science*

*problem solving: A case study*. Indiana University. Committee

member.

Chen, Y. (2023). *Exploring Inquiry learning and facilitation in*

*technology-enhancedK-12 STEM classrooms: A multidimensional*

*investigation*. Indiana University. Committee member.

Huber, J. (2023). *Elements of professional development that impact*

*technology integration in the classroom*. Indiana University.

Committee member.

Alghamdi, K. (2023). *Instructional strategies for teaching*

*computational thinking in secondary school computer science*

*introductory courses*. Indiana University. Committee member.

Hansel, C. (2023). *Examining instructional designers’ and faculty*

*members’ relationship building and perception of co-design higher*

*education partnerships*. Indiana University. Committee member.

Zhao, M. (2023). *A study of scaffolding practices for enhanced*

*learning engagement in Coursenetworking, an academic social*

*networking site*. Indiana University. Committee member.

Hatfield, J. (2023). *A case study of student perceptions of online*

*course design features and success in a Bachelor of Health*

*Sciences program*. Indiana University. Dissertation chair.

Cockrum, T. (2023). *Student perceptions of self-reflection on video*

*and expert peer feedback.* Indiana University. Dissertation chair.

Kozak, C. (2022). *U.S Army intelligence training personnel attitudes,*

*beliefs, and perceptions toward adoption of virtual reality (VR): A*

*case study*. Indiana University. Dissertation chair.

Park, J. (2022). *The relationships among sustainable work*

*environment, human agency, openness to change, and innovative*

*work behavior*. Indiana University. Committee member.

Jia, K. (2022). *Strategies to support student reflection in service-*

*learning: A tale of two parties.* Indiana University. Committee

member.

Easterling, L. (2022). *Collaborative faculty development activities in*

*higher education institutions – An activity systems analysis*.

Indiana University. Committee member.

Shao, Z. (2022). *The adoption of digital badges in higher education:*

*A case study of a faculty professional development program*.

Indiana University. Committee member.

Walker, F. (2022). *An exploration of the attributes of computer-*

*mediated instructional video that stimulate social presence*.

Indiana University. Dissertation chair.

Batchelder, S. (2022). *Case-based instruction in entrepreneuship*

*education: An instructor’s perspective on implementation and*

*gender diversity*. Indiana University. Dissertation chair.

Sankaranarayanan, R. (2022). *Influence of microlearning approach on*

*introductory database programming concepts*. Indiana University.

Committee member.

Hoffmann, G. (2022). *Intercultural communicative competence (ICC)*

*development: Perceptions of college students from a 400-level*

*elective Chinese language course*. Indiana University. Committee

member.

McCracken, K. (2022). *An analysis of higher education faculty*

*concerns regarding the implementation of a universal design*

*initiative*. Indiana University. Dissertation chair.

Campbell, A. (2022*). Practice what you preach: An evaluation of U.S.*

*Coast Guard’s use of human performance technology to foster a*

*learning organization*. Indiana University. Dissertation chair.

Garcia, K. (2021). *Instructor preservice training in U.S. Air Force’s*

*Special Warfare Training Wing: A needs assessment*. Indiana

University. Committee member.

Wilgenbusch, B. (2021). *The application of case-based learning on*

*the development of clinical judgment skills in undergradaute*

*nursing students*. Indiana University. Committee member.

Stockstell, C. (2021). *Problem-solving and planning for school*

*improvement during a global pandemic*. Indiana University.

Committee member.

Bae, H. (2021). *How teachers engage within PBL classroom*

*environment: A multiple case study of elementary, middle, and*

*high school teachers orchestration and scaffolding practice*.

Indiana University. Committee member.

Howard, J. (2021). *An evaluation of a new hire training program for*

*mental health staff in a non-profit organization*. Indiana

University. Committee member.

Ray, J.J. (2021). *Multimodal analysis of cultural assumptions in*

*American Sign Language print and online curricula*. Indiana

University. Committee member.

Olmstead, A. (2021*). Instructional designers’ identity and perceptions*.

Indiana University. Committee member.

Wavle, S. (2021). *An exploratory mixed methods study of persistence*

*patterns in online undergraduate programs and perspectives of*

*returning online undergraduate students*. Indiana University.

Committee member.

Nadir, H. (2021). *Investigating a teacher’s scaffolding for design*

*problem solving in project-based learning*. Indiana University. Co-

chair with Dr. Krista Glazewski.

Aslaif, M. (2021). *Exploring knowledge construction phases and*

*facilitating factors in an online community*. Indiana University.

Committee member.

Parker, C. (2020). *Instructional design perception and practice in*

*United States Army training organizations: A case study*. Indiana

University. Dissertation chair.

Edelberg, T. (2020). *Rural school district leadership: Supporting*

*technology integration for instructional spaces*. Indiana University.

Dissertation chair.

Lachheb, A. (2020). *Design failure in instructional design practice:*

*Practitioners’ perspective*. Indiana University. Committee

member.

Barber, R. (2020). *A case study of communications between*

*school administrators and teachers in an urban middle school*.

Indiana University. Committee member.

Alangari, H. (2019). *Parents as stakeholders in the use of digital*

*technology in elementary classrooms*. Indiana University.

Dissertation chair.

Leuchtmann, A. (2019). *New teacher induction: Perspectives from*

*participants of a new teacher mentoring program*. Indiana

University. Dissertation chair.

Barnette, J. (2018). *Instructor presence in online education: An*

*analysis of student perceptions and performance*. Indiana

University. Dissertation chair.

Liao, Y-C. (2018). *Coaching in teacher professional development for*

*technology integration: Examining teacher practices and*

*perceptions*. Indiana University. Committee member.

Rodriguez, O. (2018). *A study of the effectiveness of computer-aided*

*instruction for the improvement of hands-on engineering*

*technology education*. Indiana University. Dissertation chair.

Ding, A-C. (2018). *Language teachers’ reflection on using technology*

*in language education through an online video-embedded*

*reflective inquiry process*. Indiana University. Committee member.

Drumm, S. (2018). *Parent perceptions of an elementary one-to-one*

*initiative: First year reflections*. Indiana University. Dissertation

chair.

Wise, S. (2018). *Collective participation professional development in*

*standards-based instruction: An investigation of teacher and*

*administrator perceptions*. Indiana University. Dissertation chair.

Callison, M. (2017). *A case study examining how school leaders*

*support school-wide implementation of problem-based learning*

*in a comprehensive public high school*. Indiana University.

Dissertation chair.

Sadik, O. (2017). *What do secondary computer science (CS) teachers*

*need? Examining curriculum, pedagogy, and contextual support.*

Indiana University. Dissertation co-chair with Anne Ottenbreit-

Leftwich.

Jung, J. (2017). *Case-based instructional practices: A multiple case*

*study from torts, marketing, and online instructional design*

*classes*. Indiana University. Committee member.

Shin, S. (2016). *Scaffolding students’ inquiry-based learning in a*

*technology-enhanced classroom: An analysis of interaction*

*patterns of scaffolding*. Indiana University. Dissertation chair.

Kim, M. (2016). *Formative research on instructional overlay for*

*collaborative project-based learning*. Indiana University.

Committee member.

Goodrum, D. (2016). *Relative utility of three models for user*

*evaluation of learning management systems: A higher-ed*

*institution decision context*. Indiana University. Dissertation chair.

Shin, S. (2015). *The use of technology-enhanced cases in teacher*

*education: A case study of a social studies methods course*. Indiana

University. Dissertation chair.

Anderson, G. (2015). *An exploration of multimedia use in an online*

*RN-BSN program*. Indiana University. Dissertation chair.

Song, D. (2015). *Scaffolding student-generated questioning for*

*improving reading comprehension*. Indiana University. Committee

member.

Hsieh, Y. (2015). *The nature of peer-peer interaction in Internet-*

*supported collaboration: A case study in a freshman English class*

*in Taiwan*. Indiana University. Committee member.

Barrett, A. (2014). *Facilitating variable-length computerized*

*classification testing via automatic racing calibration heuristics*.

Indiana University. Committee member.

Cao, K. (2014). *Exploring users’ goals and behaviors in two*

*commercial games*. Indiana University. Committee member.

Chang, J.Y. (2013). *The effects of agent-based lecturers on student*

*learning and conceptual change in an online inquiry-based*

*learning environment*. Indiana University. Committee member.

Van Leusen, P. (2013). *Interpersonal consulting skills among*

*instructional technology consultants at an institution of higher*

*education in the Midwest: A multiple case study*. Indiana

University. Dissertation chair.

Lara, M. (2013). *Personality traits and performance in online game-*

*based learning: Collaborative versus individual settings*. Indiana

University. Committee member.

Lin, C.Y. (2013). *Instructional theory for using a class wiki to support*

*collaborative learning in higher education*. Indiana University.

Committee member.

Studebaker, J. (2011). *Online education and high school students: A*

*mixed methods investigation into performance, access, and*

*perception*. Indiana University. Committee member.

Strycker, J. (2011). *A comparison of technology experiences included*

*in alternative and traditional teacher education programs*. Indiana

University. Dissertation chair.

Sheu, Feng-Ru. (2011). *Understanding expertise from elite badminton*

*coaches*. Indiana University. Committee member.

Gronseth, S. (2011). *Factors that impact the use of assistive*

*technologies to support secondary students with mild disabilities*.

Indiana University. Dissertation chair.

Feng, Yu. (2010). *A discourse analysis of five experienced secondary*

*social studies teachers scaffolding historical empathy through*

*deliberative discussion*. Indiana University. Dissertation chair.

Yerasimou, T. (2010). *Examining interactivity and flow in a blended*

*course to advance blended learning practices*. Indiana University.

Dissertation chair.

Kim, N. (2010). *Scaffolding critical thinking in wikibook creation*

*across international institutions*. Indiana University. Committee

member.

Pereira-Leone, M. (2010). *Constraints, resources, and interpretive*

*schema: Explorations of teachers’ decisions to utilize, under-*

*utilize, or ignore educational technologies*. Indiana University.

Committee member.

Marquis, J. (2009). *Children without toys: How home computer use*

*impacts school achievement, behavior, and attitudes*. Indiana

University. Dissertation chair.

Wang, Y. (2009). *A case study of an accelerated blended teacher*

*education program*. Indiana University. Dissertation chair.

Lee-Watson, S. (2008). *Somebody’s gotta fight for them: A*

*disadvantaged and marginalized alternative school’s culture of*

*learning and its case of change*. Indiana University. Committee

member.

Scott, B. (2008). *The role of teacher epistemology in integrating*

*student-centered instructional software: A case study in social*

*studies education*. Auburn University. Committee member.

DeFazio, J. (2008). *Designing with precedent: A cross-disciplinary*

*inquiry into the design process*. Indiana University. Committee

member.

Kelly, M. (2008). *The use of multimedia technology to enhance self-*

*determination skill and encourage student leadership in*

*educational goal planning for post-secondary students with*

*Asperger syndrome*. Indiana University. Committee member.

Richter, K. (2007). *Integration of a decision-making process and a*

*learning process in a newly formed leadership team for systemic*

*transformation of a school* *district*. Indiana University. Committee

member.

Hinshaw, R. (2007). *Universal design for learning procedures in*

*special education teacher education*. Indiana University.

Committee member.

Kale, U. (2007). *Online communication patterns in a teacher*

*professional development program*. Indiana University.

Dissertation chair.

Hur, J.W. (2007). *Understanding teacher participation in online*

*communities: Why do teachers want to participate in online*

*communities of teachers?* Indiana University. Dissertation chair.

Kirkley, J. (2006). *An exploratory study on designing expert and*

*novice scaffolds to support decision making and learning in a set*

*of simulation vignettes*. Indiana University. Committee member.

Hew, K. (2006). *Knowledge sharing among professionals in three*

*online communities*. Indiana University. Dissertation chair.

Tan, A. (2006). *Does scaffolded blogging promote preservice teacher*

*reflection? Examining the relationships between learning tool and*

*scaffolding in a blended learning environment*. Indiana University.

Dissertation chair.

Cullen, T. (2006). *The role of technology in preservice teachers’*

*images of their future classroom*. Indiana University. Dissertation

chair.

Gottschall, H. (2006). *Faculty and student attitudes towards group*

*work in higher education and why faculty use groups*. Indiana

University. Committee member.

Su, B. (2006). *Experiences of and preferences for interactive*

*instructional activities in an online learning environment*. Indiana

University. Committee member.

Sung, L. (2006). *How methods and technology instructors think about*

*good practice: An exploration for transforming pre-service*

*curriculum*. Indiana University. Committee member.

del Valle, R. (2005). *Online learning: Learner characteristics and*

*their approaches to managing learning*. Indiana University.

Committee member**.**

Liu, X. (2005*). Socio-cultural factors affecting the success of an*

*online MBA course: A case study viewed from activity theory*

*perspective*. Indiana University. Committee member.

# Frey, T. (2005). *Investigating the impact of an on-line practicum*

# *experience for in-service special education teachers*. Indiana

# University. Committee member.

# Kim, M. (2005). *Concerns of teacher education methods instructors*

# *and strategies for integrating technology into methods courses*.

# Indiana University. Dissertation director.

# So, H. (2005). *Examining the relationships among collaborative*

# *learning, social presence, and satisfaction in a distance learning*

# *environment*. Indiana University. Dissertation chair.

Hixon, E. (2005). *Collaborative online course development: The*

*faculty experience*. Indiana University. Committee member.

Keller, J. (2003). *A systems view of professional development in a K-*

*12 school district*. Indiana University. Committee member.

Glazewski, K. (2003). *The impact of scaffolding and student ability in*

*a hypermedia, problem-based learning unit*. Arizona State

University. Committee member.

Jowett, M. (2003). *Integrating technology into instruction: Relative*

*effects of two types of mentoring models*. Arizona State University.

Committee member.

Judson, E. (2002). *Relationship among instructional beliefs, attitudes*

*toward technology, and constructivist practices of technology*.

Arizona State University. Committee member.

Batarelo, I. (2002). *Educational technology promises as perceived by*

*secondary special education teachers*. Arizona State University.

Committee member.

Smith, T.C. (2002). *An analysis of teacher educators and technology*

*integration projects at four universities*. Arizona State University.

Co-chair with Dr. Nicholas Appelton.

Niemczyk, M. (2002). *The effects of prompting and advisement on*

*student learning from an open-ended database*. Arizona State

University. Committee member.

Stirling, D. (2002). *Towards new norms of professional interaction:*

*Facilitating teacher talk using multimedia*. Arizona State

University. Committee member.

Rich, D. (2001). *Creating meaningful computer instruction for young*

*children through transactional tutoring*. Arizona State University.

Chair.

# Brinkerhoff, J. (2001). *The effects of advisement and informal*

# *cooperative groups on learning from a multimedia database*.

# Arizona State University. Co-chair with Dr. James Klein.

# Ku, H.Y. (2001). *The effects of personalization on comprehension*

# *of word problems for students in Taiwan.* Arizona State

# University. Committee member.

# Wolf, S. (2000). *The big six information skills as a metacognitive*

# *scaffold in solving information based problems*. Arizona State

# University. Chair.

# Sutton, L. (2000). *Vicarious interaction in a course enhanced*

# *through the use of computer-mediated communication.* Arizona

# State University. Committee member.

# Miltiadou, M. (2000). *Motivational constructs as predictors of*

# *success in the online classroom*. Arizona State University.

# Committee member.

# Mahesh, V. (2000). *The nature and purpose of feedback in a dialogic*

# *online learning community*. Arizona State University. Committee

# member.

# Winograd, D. (2000). *The effects of trained moderation in online*

# *asynchronous distance learning*. Arizona State University.

# Committee member.

# Koroghlanian, C. (2000). *Animation, audio, and spatial ability:*

# *Optimizing multimedia for scientific explanations*. Arizona State

# University. Committee member.

Vrasidas, C. (1999). *Meanings of online and face-to-face interactions*

*in a graduate course*. Arizona State University. Committee

member.

Amato, V. (1999). *The effect of learner control on knowledge gain in*

*an interactive multimedia instructional environment*. Arizona State

University. Committee member.

**SERVICE** *Co-Director, Persistent Issues in History Summer Seminar*

**ACTIVITIES**(2003 – 2013)

Co-director of summer institutes in which 20 social studies

teachers from around the country came to Auburn University to

learn about problem-based historical inquiry strategies in

secondary social studies.

*Coordinator, Professors of Instructional Design and Technology*

*(PIDT) Conference* (2018 – 2019)

Coordinator and leader of planning for annual conference with

approximately 40 faculty and graduate student attendees.

*AERA SIG – Instructional Technology*

Chair (2009-2010)

Chair-elect (2008-2009)

*AECT Young Researcher Award*

Coordinator (2004 – 2011)

Member of Selection Committee (2002 – 2022)

*Educational Technology Research and Development*

Editorial Board (2001 – 2004)

Consulting Editor (1997 – present)

Guest Editor, Issue *51*(1)

### International Journal of Learning Technology

Editorial Board (2004 – 2010)

Guest Editor, Issue *1*(2)

*Tech Trends*

Editorial Board (2005 – 2014)

Consulting Editor (2004 – present)

### International Journal of Web Engineering and Technology

Editorial Board (2003 – 2010)

### Computers & Education

Consulting Editor (2008 – 2022)

### Interdisciplinary Journal of Problem-Based Learning

Consulting Editor (2005 – present)

Guest Editor, Issue *8*(1)

### Teacher College Record

Consulting Editor (2003 – 2021)

### Theory and Research in Social Education

Consulting Editor (2003 – 2022)

*Journal of Educational Computing Research*

Consulting Editor (1999 – 2022)

*Educational Leadership*

Consulting Editor (2000 – 2022)

*Arizona Educational Research Organization*

Board Member (2001 – 2002)

*Association for Educational Communications and Technology*

Board Member, Research and Theory Division (1997 - 2000)

*Eastern Educational Research Association*

Alabama, Kentucky, Louisiana, Mississippi, and Tennessee

Regional Representative (1997 - 1998)

*Allyn and Bacon Publishers*

Book reviewer for educational technology publications (1997)

### Indiana University

Program Leader, IST Program (2023 – present)

Search Committee Member, Hasselbring Chair (2023 – 2024)

Member, ELPS Chair Evaluation Committee (2023 – 2024)

Chair, Associate Dean for Graduate Studies Evaluation

Committee (2021)

Member, School of Education Space Usage Task Force (2021)

Co-Chair, School of Education Long Range Planning Committee

(2021 – 2022)

Member, School of Education Long Range Planning Committee

(2023 – 2024)

Chair, School of Education Research and Development Committee

(2021)

Member, School of Education Research and Development

Committee (2002 – 2003; 2005 – 2006; 2007 – 2008; 2019 –

2021)

Interim Department Chair, Instructional Systems Technology

(Spring 2019)

Coordinator, IST EdD Program (2018 – 2022)

Member, IST EdD and Online Masters Self-Study Committee

(2020)

Member, School of Education Tenure and Promotion Committee

(2018 – 2020; 2023 - present)

Member, School of Informatics and Computer Science

Collaboration Committee (2019 – 2022)

Member, Otting Chair Selection Committee (2018)

Member, School of Education Policy Council (2018 – 2019)

Member, IU-Bloomington Technology Policy Committee (2018 –

2019; 2020 – 2021)

Member, Associate Dean for Teacher Education Review

Committee (2020).

Chair, Associate Dean for Teacher Education Evaluation

Committee (2017 – 2018)

Chair, Center for Research on Learning and Technology Review

Committee (2016 – 2017)

Chair, ELPS Department Chair Evaluation Committee (2013 –

2014)

Member, Indiana University Learning Technologies Steering

Committee (2017 – present)

Member, Alliance for Distinguished and Titled Professors

(2011 – 2016)

Member, Scholarship of Teaching and Learning Advisory

Committee (2011 – 2016)

Search Committee Co-Chair, joint IST/Informatics search

(2011 -2012)

Chair, General Education Social and Historical Subcommittee

(2009 – 2014)

Member, General Education Evaluation System Committee (2009-

2014)

Member, Lumina Foundation Tuning Project Committee (2009)

Member, General Education Social and Historical Subcommittee

(2008-2009, 2014 – 2015)

Chair, Committee for Teacher Education (2005-2006, 2008)

Faculty Advisor, GIST – Graduate Students in Instructional

Systems Technology (2005 – 2012)

Member, Committee on Writing (2007 – 2008)

Member, Secondary Education Council (2007 – 2008)

Member, Associate Dean Search Committee (2008)

Search Committee Chair, IST (2005-2006; 2010-2011; 2023-2024)

Member, Staff Merit Awards Committee (2004 – 2015)

Member, IST Portfolio Committee (2012 – present)

Member, IST Admissions Committee (2002 – 2019; 2023-present)

Member, IST Undergraduate Curriculum Committee (2002 –

present)

Member, IST Graduate Curriculum Committee (2021 – present)

Member, Structural Reorganization Committee (2003)

Member, Jacobs and Armstrong Chair Selection Committee (2003)

Member, Committee for Teacher Education (2003 – 2008)

*Arizona State University*

Program Leader, Educational Technology (2001 – 2002)

Secretary, College Council (2001 – 2002)

Search Committee Chair, Educational Technology (2001 – 2002)

Search Committee Member, Learning (2001 – 2002)

Search Committee Member, Educational Technology (2000 –

2001)

Search Committee Member, Learning (2000 – 2001)

Search Committee Member, Learning (1998 – 1999)

*Auburn University*

Search Committee Chair, Educational Media (1997 – 1998)

Search Committee Member, Educational Media (1996 – 1997)

Member, Equipment Committee (1995 – 1998)

*State of Arizona*

Member, State Technology Plan Steering Committee

(2000 – 2002)

*State of Alabama*

Member, Technology Planning Advisory Committee (1996 –

1998)

Member, Technology for Alabama Teachers Standards Committee

(1996 – 1998)

*Army Research Institute, Fort Benning, GA*

Design/evaluation consultant (1995 – 1998)

*US Army*

Trainer/developer for the Army Infantry School at Ft. Benning,

GA and the Chemical School at Ft. McLellan, AL (1996 – 2000)

Design/evaluation consultant for the Army Intelligence School, Ft.

Huachuca, AZ (1999 – 2002)

Trainer for Air Force personnel, Goodfellow AFB, San Angelo,

TX (2020)

Trainer for TRADOC personnel, Ft. Rucker, AL (2006 – present)

Trainer for TRADOC personnel, Redstone Arsenal, AL (2008)

Trainer for TRADOC personnel, Ft. Benning/Ft. Moore, GA

(2008 – present)

Trainer for TRADOC personnel, Ft. Sill, OK (2008 - 2010)

Trainer for TRADOC personnel, Ft. Eustis, VA (2015)

Trainer for TRADOC personnel, Ft. Lee, VA (2017)

Trainer for TRADOC personnel, Ft. Bliss, TX (2018)

*US Department of Education*

Member, external advisory board, Charter School grant program

(2016 – present)

*Pearson Digital Learning, Scottsdale, AZ*

Design/evaluation consultant (2004 – 2011)

*Program reviewer for the following universities*:

Wayne State University, Detroit, MI

Keiser University, Ft. Lauderdale, FL

University of Tennessee, Knoxville, TN

Florida State University, Tallahassee, FL

Old Dominion University, VA

Sam Houston State University, TX

*Educational technology consultant/trainer for the following schools*:

Mount Clemens Schools, Mount Clemens, MI

L’Anse Creuse Schools, Harrison Township, MI

South Lyon Schools, South Lyon, MI

Auburn City Schools, Auburn, AL

Opelika City Schools, Opelika, AL

Monroe County Community Schools, Bloomington, IN

Cristel House Academy, Indianapolis, IN

El Paso School District, El Paso, TX