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Education

Doctor of Philosophy, Instructional Technology, University of Virginia, Charlottesville, VA (May 2007).

Dissertation: *Media, Scaffolds, Canvases: A Quantitative and Qualitative Investigation of Student Content Knowledge Outcomes in Technology-Mediated 7th-Grade History Instruction*. This classroom-based quasi-experiment used switching replication to explore the relative learning outcomes from students' creation of summative media projects using either a purpose-built application (PrimaryAccess, an online digital documentary editor) or a generic productivity application (PowerPoint). Mixed methods were used to address the research questions, including analysis of student performance on test items and open-ended prompts, students' media products, classroom observation notes, teacher document collection, and teacher interview. Findings suggested more positive learning outcomes from using the purpose-built application, with emphasis placed on the relative level of scaffolding afforded to the students.

Bachelor of Arts, History and International Studies, Yale University, New Haven, CT (graduated with honors, May 1994).

Employment History

Associate Dean, College of Education, Lehigh University, Bethlehem, PA. (July 2016—June 2019). Oversee Admissions & Recruitment Office and Office of Teacher Certification. Oversee student academic progress, analyze enrollment data, represent the college on university committees.

Associate Professor, Teaching, Learning, and Technology Program, Lehigh University, Bethlehem, PA. (June 2015 – present). Research and scholarship, teaching, and service to the college, university, community, and profession. Write grant proposals, conduct research, and publish manuscripts. Develop curricula and courses for master's and doctoral programs in instructional technology and teacher education.

Assistant Professor, Teaching, Learning, and Technology Program, Lehigh University, Bethlehem, PA. (July 2007 – May 2015).

Graduate Fellow and Teaching Assistant, Curry School of Education, University of Virginia, Charlottesville, PA (August 2004 – May 2007). Taught courses on technology integration for teachers, assisted courses in social studies methods. Coordinated activities of other graduate instructors, scheduled room and technology requests.

Teacher, Department Chair, and Educational Technology Coordinator, American International School of Jeddah, Saudi Arabia (August, 2002-June, 2004). Taught AP Economics and Computer Science. Served as Technology Department Chair, overseeing technology curriculum and departmental budget. Served as Educational Technology Coordinator, preparing school-wide technology plan and coordinating move to online grade and attendance reporting systems.

Teacher and Educational Technology Coordinator, Union School of Port-au-Prince, Haiti (August, 2000-June, 2002). Taught Social Studies and Language Arts. Served as Educational Technology Coordinator, preparing school-wide technology plan, supervising technology budget, reporting to the board, and executing move to a new, purpose-built campus.

Teacher and Summerbridge Director, Saint Xavier High School, Cincinnati, Ohio (August 1994-June 2000). Taught Social Studies and Language Arts, including AP European History. Directed Summerbridge program, serving under-represented youth throughout Cincinnati: recruited talented high school- and college-age staff and middle-school student body, conducted staff training, oversaw budget, reported to board, located housing for out-of-town staff, supervised school-year tutoring program, served as advocate and mentor for students, staff, and alumni.

Publications and Creative Activities

Chapters in Books

Hammond, T.C., Oltman, J., & Manfra, M.M. (2019). Computational thinking and social studies teacher education: What, why, and how. In S. Keengwe (Ed.), *Handbook of research on integrating computer science and computational thinking in K-12 education* (pp. 1-16). Hershey, PA: IGI.

Hammond, T.C., & Oltman, J. (2019). Bridging STEM and the civic mission of social studies: Integrating spatial reasoning & computational thinking into decision-focused secondary social studies instruction. In D. Gibson & M. Ochoa (Eds.), *Research highlights in technology and teacher education 2019* (pp. 127-132). Waynesville, NC: Association for the Advancement of Computing in Education.

Cates, W.M., & Hammond, T.C. (2017). Position statement: For the foreseeable future, instructional technology devices and products will not eliminate the need for human teachers. In A.A. Carr-Chellman & G. Rowland (Eds.), *Classic dialogues: Exploring the field of educational technology* (pp. 158-165). New York: Routledge.

Sawyer, B.E., Manz, P.H., Martin, K.A., Hammond, T.C., & Garrigan, S. (2017). Teachers and parents as partners: Developing a community of practice to support latino preschool dual language learners. In J.A. Sutterby (Ed.), *Family involvement in early education and child care* (pp. 159-186). Bingley, UK: Emerald.

Hammond, T. (2015). "You are here": Developing elementary students' geography skills by integrating geospatial information technologies. In L. Liu & D.C. Gibson (Eds.), *Research highlights in technology and teacher education 2015*, pp. 129-136. Waynesville, NC: Association for the Advancement of Computing in Education.

Hammond, T.C., Alexander, R.C., & Bodzin, A.M. (2012). Assessment in authentic environments: Designing instruments and reporting results from classroom-based TPACK research. In R.N. Ronau, C.R. Rakes, & M.L. Neiss (Eds.), *Educational technology, teacher knowledge, and classroom impact: A research handbook on frameworks and approaches* (pp. 32-57). Hershey, PA: Information Science Reference.

Bell, L., Juersivich, N., Hammond, T.C., & Bell, R. (2012). The TPACK of dynamic representations. In R.N. Ronau, C.R. Rakes, & M.L. Neiss (Eds.), *Educational technology, teacher knowledge, and classroom impact: A research handbook on frameworks and approaches* (pp. 103-135). Hershey, PA: Information Science Reference.

Hammond, T., & Lee, J. (2010). Integrating digital video into social studies instruction. In G. Bull & L. Bell (Eds.), *Teaching with digital video* (pp. 15-38). Eugene, OR: International Society for Technology in Education.

Manfra, M.M., & Hammond, T.C. (2010). From personal pastime to curricular resource: The case of digital documentaries in the social studies. In R. Diem and M. Berson (Eds.), *Technology in retrospect: Social studies' place in the Information Age, 1984-2009* (pp. 91-107). Charlotte, NC: Information Age.

Hammond, T.C., & Ferster, B. (2009). Student-created digital documentaries in the history classroom: Outcomes, assessment, and research design. In J. Lee & A. Friedman (Eds.), *Research on technology in social studies education* (pp. 39-66). Charlotte, NC: Information Age.

Bull, G., & Hammond, T. (2008). The Future of eLearning in K-12 schools. In H.H. Adelsberger, Kinshuk, J.M. Pawlowski, & D.G. Sampson (Eds.), *Handbook on information technologies for education and training* (2nd ed., pp. 345-361). New York, NY: Springer.

Bull, G., Bell, L., & Hammond, T. (2008). Advancing TPACK through collaborations across educational associations. In P. Mishra & M. Koehler (Eds.), *Handbook of technological pedagogical content knowledge for teaching and teacher educators* (pp. 273-287). Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.

Bull, G., Hammond, T., & Grimes, P. (2007). Podcasting in the social studies classroom. In Bennett, L., & Berson, M. (Eds.), *Digital age: Technology-based K-12 lesson plans for social studies* (pp. 185-189). Silver Spring, MD: National Council for Social Studies.

Hammond, T., & Sebastian, R. (2005). Digital images and video editing software. In G. Bull & L. Bell (Eds.), *Teaching with digital images: Acquire-analyze-create-communicate* (pp. 29-42). Eugene, OR: International Society for Technology in Education.

Publications: Articles in Refereed Journals

Hammond, T.C., Bodzin, A., Anastasio, D., Holland, B., Popejoy, K., & Sahagian, D. (2019). Shoulder-to-shoulder: Teacher professional development and curriculum design and development for geospatial technology integration with science and social studies teachers. *Contemporary Issues in Technology and Teacher Education*, 19(2), 279-301.

Carrigan, J., Bodzin, A., Hammond, T., Rutzmoser, S., & Farina, W. (2019, April/May). Investigating urban trees. *The Science Teacher*, 27-35.

Hammond, T.C., Oltman, J., & Salter, S. (2019). Using computational thinking to explore the past, present, and future. *Social Education*, 83, 118-122.

Kangas, S., Hammond, T.C., & Bodzin, A. (2019). Using geospatial technology to teach language and content to English learners. *TESOL Journal*. DOI: 10.1002/tesj.422

Hammond, T.C., Bodzin, A., Anastasio, D., Holland, B., Popejoy, K., & Sahagian, D. (2018). “You know you can do this, right?”: Developing geospatial technological pedagogical content knowledge (GS-TPACK) and enhancing teachers’ cartographic behaviors with Socio-Environmental Science Investigations (SESI). *Cartography and Geographic Information Science*, 45, 305-318.

Stanlick, S.E., & Hammond, T.C. (2016). Service-learning and undergraduates: Exploring connections between ambiguity tolerance, empathy, and motivation in an overseas service trip. *International Journal of Research on Service-Learning and Community Engagement*, 4(1), 1-17.

Hammond, T. (2014). Transforming the history curriculum with geospatial tools. *Contemporary Issues in Technology and Teacher Education*, 14(3), 266-287.

Hammond, T.C., Bodzin, A.M., & Stanlick, S.E. (2014). Redefining the longitude/latitude experience with a scaffolded geocache. *Social Studies*, 105, 237-244.

Alexander, C. & Hammond, T. C. (2012). Five-picture charades: A flexible model for technology training in digital media tools and teaching strategies. *Contemporary Issues in Technology and Teacher Education*, 12(1), 55-70.

Ferster, B., Hammond, T.C., Alexander, R.C., & Lyman, H. (2012). Automated formative assessment as a tool to scaffold student documentary writing. *Journal of Interactive Learning Research*, 23(1), 81-99.

Snyder, J.W., & Hammond, T.C. (2012). "So that's what the Whiskey Rebellion was!" Teaching early U.S. History with GIS. *The History Teacher*, 45, 447-455.

Hammond, T. (2010). "So what?" Students' articulation of civic themes in middle-school digital documentary projects. *The Social Studies*, 101(2), 54-59.

Hammond, T.C., & Manfra, M.M. (2009). Digital history with student-created multimedia: Understanding student perceptions. *Social Studies Research & Practice*, 4(3), 139-150.

Hammond, T., & Bodzin, A. (2009). Teaching with rather than about Geographic Information Systems. *Social Education*, 73, 119-123.

Hammond, T. (2009, March/April). Wikipedia: Friend or foe? (Point/Counterpoint). *Learning and Leading with Technology*, 8-9.

Bodzin, A.M., Hammond, T.C., Carr, J., & Calario, S. (2009, August). Finding their way with GIS. *Learning and Leading with Technology*, 34-35.

Hammond, T.C., & Manfra, M.M. (2009). Giving, prompting, making: Aligning technology and pedagogy within TPACK for social studies instruction. *Contemporary Issues in Technology and Teacher Education*, 9(2), 160-185.

Manfra, M., & Hammond, T. (2008). Teachers' instructional choices with student-created digital documentaries: Case studies. *Journal of Research on Technology in Education*, 41, 223-245.

Bull, G., Hammond, T., & Ferster, B. (2008). Developing Web 2.0 tools for support of historical inquiry in Social Studies. *Computers in the Schools*, 25(3/4), 275-287.

Hammond, T. (2007). A task-oriented framework for stand-alone technology integration classes. *Journal of Computing in Teacher Education*, 23(4), 153-158.

Ferster, B., Hammond, T., & Bull, G. (2006). PrimaryAccess: Creating digital documentaries in the social studies classroom. *Social Education*, 70, 147-150.

Working Papers

Shameem, A., & Hammond, T.C. (Under review). Influence of culture on teachers' attitudes towards technology.

Hammond, T.C., Bodzin, A.M., Salter, S., Hanson, I., Rutzmoser, S., Popejoy, K.L., Holland, B., Farina, W., Junior, R.M.deA., Lopez, E., Anastasio, D., & Sahagian D. Geography and civics in action: Reverse-engineering urban planning by studying zoning and the built environment with WebGIS.

Oltman, J., & Hammond, T.C. (In revision). "I almost wanted to touch it": Flow and learning in game-based history education with augmented reality for early elementary students.

Hammond, T.C., & Oltman, J. (In preparation). Enhancing early elementary civics education through augmented reality games.

Articles in Conference Proceedings (all refereed)

Hammond, T. & Bodzin, A. (2019). So what happens when the funding runs out? Professional development for sustainable geospatial technology integration initiatives. In K. Graziano (Ed.), *Proceedings of Society for Information Technology & Teacher Education International Conference* (pp. 1666-1672). Las Vegas, NV, United States: Association for the Advancement of Computing in Education (AACE). Retrieved July 25, 2019 from <https://www.learntechlib.org/primary/p/207867/>.

Hammond, T. (2016). A geospatial approach to teachers' diversity education. In G. Chamblee & L. Langub (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2016* (p. 1636). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).

Hammond, T. & Oltman, J. (2016). The sleeping giant awakens? Two cases in geospatial tools re-shaping curricular content in elementary social studies. In G. Chamblee & L. Langub (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2016* (pp. 1637-1640). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).

Rosenblum, R. & Hammond, T. (2015). Middle level special education teachers' adoption of interactive whiteboards in social studies instruction. In D. Rutledge & D. Slykhuis (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2015* (pp. 2992-2999). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).

Oltman, J. & Hammond, T.C. (2015). Exploring the use of a location-based iPad augmented reality game for elementary history education. In D. Rutledge & D. Slykhuis (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2015* (pp. 818-821). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).

Hammond, T.C., Langran, E., & Baker, T.R. (2014). Survey of geospatial information technologies in teacher education. In M. Searson & M. Ochoa (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2014* (pp. 873-881). Chesapeake, VA: AACE.

Hammond, T.C., & Rosenblum, R.B. (2013). Teacher adoption of geospatial tools in special needs secondary history classrooms: Case studies. In R. McBride & M. Searson (Eds.),

Proceedings of Society for Information Technology & Teacher Education International Conference 2013 (pp. 4627-4629). Chesapeake, VA: AACE.

Hammond, T. & Shameem, A. (2012). Technology in context: The case of teachers' attitudes toward technology in the Maldives. In P. Resta (Ed.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2012* (pp. 2287-2317). Chesapeake, VA: AACE.

Alibrandi, M., Baker, T., Langran, E., Hammond, T., Zalles, D. & Nagel, P. (2012). Developing a curricular sequence for K-16 geospatial integration. In P. Resta (Ed.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2012* (pp. 3511-3513). Chesapeake, VA: AACE.

Hammond, T. & Langran, E. (2011). Geospatial tools and social studies teacher education: case studies. In M. Koehler & P. Mishra (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2011* (pp. 3834-3837). Chesapeake, VA: AACE.

Hammond, T. & Lee, J. (2011). Film in social studies teacher education: Practices, purposes, and paradigms. In M. Koehler & P. Mishra (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2011* (pp. 4178-4181). Chesapeake, VA: AACE.

Alexander, C. & Hammond, T. (2010). Promoting student engagement in history with PrimaryAccess Storyboard. In D. Gibson & B. Dodge (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2010* (pp. 3660-3663). Chesapeake, VA: AACE.

Hammond, T. (2008). "So what?" Students' articulation of civic themes in middle-school digital documentary projects. In K. McFerrin et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2008* (pp. 4875-4880). Chesapeake, VA: AACE.

Hammond, T. (2008). Scaffolded vs. unscaffolded digital history projects: A quasi-experiment in a middle school history classroom. In K. McFerrin et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2008* (pp. 4884-4888). Chesapeake, VA: AACE.

Hammond, T., Friedman, A., Keeler, C., Manfra, M. & Metan, D. (2008). Epistemology is elementary: Historical thinking as applied epistemology in an elementary social studies methods class. In K. McFerrin et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2008* (pp. 4881-4883). Chesapeake, VA: AACE.

Alexander, C., Broome, J. & Hammond, T. (2008). TPACK and the Wisdom of Practice: The Impact of Field Trials on Digital History Projects Using PrimaryAccess. In K. McFerrin et al.

(Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2008* (pp. 5178-5180). Chesapeake, VA: AACE.

Park, J. & Hammond, T. (2008). An Updated Approach to Using Digital Video in Content Area Education, Part 1. In K. McFerrin et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2008* (pp. 943-945). Chesapeake, VA: AACE.

Park, J. & Hammond, T. (2008). An Updated Approach to Using Digital Video in Content Area Education, Part 2. In K. McFerrin et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2008* (pp. 946-948). Chesapeake, VA: AACE.

Hammond, T. & McGlenn, M. (2007). Digital historical narratives and the social studies curriculum: Student outcomes in Virginia classrooms using PrimaryAccess. In C. Crawford et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2007* (pp. 3546-3548). Chesapeake, VA: AACE.

Schrum, L. & Hammond, T. (2007). SITE Fireside Chat #2: Issues and strategies for mentoring doctoral students in instructional technology. In C. Crawford et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2007* (pp. 1114-1115). Chesapeake, VA: AACE.

Grimes, P. & Hammond, T. (2007). Teaching beyond state standards: Using technology to enhance elementary teachers' social studies preparation. In C. Crawford et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2007* (pp. 1040-1041). Chesapeake, VA: AACE.

McGlenn, M., Hammond, T., Friedman, A., Bolick, C., Bull, G., Ferster, B., Hicks, D., Lee, J., Calandra, B., Doolittle, P. & Ewing, T. (2006). Digital history in social studies teacher education: Practices, promises and provisos, Part 1. In C. Crawford et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2006* (pp. 4134-4147). Chesapeake, VA: AACE.

Edited Publications and Other Articles

Bull, G., & Hammond, T. (2011, August). A personal micro database in the cloud. *Learning and Leading with Technology*, 38-39.

Columba, L., Hammond, T., & Waddell, L. (2010). Math by the month: The math in names. *Teaching Children Mathematics*, 16, 400-401.

Hammond, T.C., & Lee, J.K. (2010). Editorial: Digital video and social studies. *Contemporary Issues in Technology and Teacher Education*, 10(1), 124-132.

Waddell, L.R., Hammond, T.C., & Columba, L. (2009). Math by the month: Let's take a trip. *Teaching Children Mathematics*, 16(3), 148-149.

Hammond, T.C., Waddell, L.R., & Columba, L. (2009). Math by the month: Fabulous, fascinating frog fun. *Teaching Children Mathematics*, 16(2), 88-89.

Hammond, T.C., & Lee, J. (2009, June/July). From watching newsreels to making videos. *Learning and Leading with Technology*, 32-33.

Hammond, T. & Bull, G. (2007). Using digital images: Teaching with Flickr. *Virginia Journal of Education*, 100(4), 28.

Bull, G., Garofalo, J., & Hammond, T. (2006). Connecting to open educational content. *Learning and Leading with Technology*, 34(1), 12-13.

Reviews

Hammond, T.C., & Draper, L. (2011). Book review: Playing games in school: Video games and simulations for primary and secondary education. *Educational Technology*, 51(2), 64.

Creative Activities: Instructional Computer Programs

- (2008-). **PrimaryAccess StoryBoard**: Produced in conjunction with Dr. Bill Ferster, Dr. Glen Bull, and Curby Alexander, PrimaryAccess StoryBoard extends the functionality within the original movie-maker by drawing upon the same database of historical images to allow students to create a series of panels. Each panel consists of a background (e.g., Mount Vernon), one or more actors (George Washington, or an image of the student), props (microphones, cameras-anything is possible), dialogue bubbles (or thought bubbles), and captions. This application can be used either as a precursor to a movie (as is typical for a traditional storyboard) or it can be used as a stand-alone project that slows down and articulates the process of looking at historical images and thinking about historical actors. The application is freely available (at <http://www.primaryaccess.org/story/>) and is written in Flash ActionScript, PHP, MySQL, and Java. I am a tester and content developer.
- (2004-). **PrimaryAccess**: Produced in conjunction with Dr. Bill Ferster and Dr. Glen Bull, PrimaryAccess is a patented online digital video editor that allows teachers to set up student activities drawing upon online images (usually archival photographs, documents, maps, and artwork) that guide students through creating a script, associating images with the script, applying motion and titles, recording a narration, and rendering a web video. The application is freely available (at <http://www.primaryaccess.org>) and currently hosts more than 3,000 activities, 12,000 movies, and more than 15,000 indexed online resources. Written in Flash ActionScript, PHP, MySQL, and Java.

Honors and Awards

Awards for Scholarship

- 2019 **Innovations in Teaching Science Teachers Award** for Bodzin, A., Hammond, T., Popejoy, K., Farina, W., Anastasio, D., Holland, B., Carrigan, J., Rutzmoser, S., & Sahagian, D. (2019, January). *A Curriculum-linked Professional Development Approach to Support Teachers' Adoption of Socio-Environmental Science Investigations*. Paper award granted at the annual meeting of the Association for Science Teacher Education (ASTE), Savannah, GA.
- 2018 **John C. Park National Technology Leadership Initiative Award** for Bodzin, A., Hammond, T.C., Popejoy, K., Farina, W., Anastasio, D., Holland, B., Carrigan, J., Rutzmoser, S., & Sahagian, D. (2018, March). *A Curriculum-linked Professional Development Approach to Support Teachers' Adoption of Socio-Environmental Science Investigations*. Invited paper at the conference of the Society for Information Technology and Teacher Education (SITE), Alexandria, VA.
- 2007 **Outstanding Doctoral Student Award** from the Department of Leadership, Foundations, and Policy at the Curry School of Education, University of Virginia.

Awards for Teaching

- 2012-14 **Frank Hook Assistant Professor**, Lehigh University.
- 2006 **Outstanding Graduate Teaching Assistant** from the Department of Leadership, Foundations, and Policy at the Curry School of Education, University of Virginia for innovative teaching of technology integration courses for pre-service teachers.

Research Funding and Training Grants

External Grants Awarded

- 2016- **Socio-Environmental Science Investigations (SESI) Using the Geospatial Curriculum Approach with Web GIS**. Design partnership between Lehigh University natural science professors, social science professors, education professors, the STEM Valley Mentoring Coalition, Building 21 science and social studies school teachers, the Allentown city government, and PPL corporation to develop geospatial investigations with Web GIS that will prepare students with skills, and career awareness, to motivate them to pursue appropriate education pathways for STEM-related occupations (Co-Primary Investigator, National Science Foundation. Awarded: \$1,200,000).

Institutional Grants Awarded

- 2018 **Immersive Virtual Reality (VR) Development of the Lehigh River Watershed.** Working with undergraduate and graduate students, built virtual reality model of the Lehigh River Watershed and Lehigh Gap Nature Center to be used in local K-12 and higher education classrooms. (Co-PI with Anastasio, Bodzin, Vallera, and Rutzmoser, \$14,550)
- 2016 **Reclaiming the Past, Inventing the Future: A Local History Lens to Citizenship Preparation.** Working with undergraduate and graduate students, applying geospatial tools, digital archives, and old-fashioned historical research through paper-based records and oral history to generate powerful, localized historical and civic investigations for use in Allentown social studies classrooms. (Co-PI with Dr. Sarah Stanlick, \$6,000)
- 2016 **CivLab: Civic Hacking, Resource Mapping, and Using Community Data to Create Change.** Working with 6 undergraduate students, guided exploration of social issues and community needs, culminating in a civic action project around a topic of the students' choice (food deserts). (Co-PI with Dr. Sarah Stanlick, \$2,000)
- 2013 **Using Augmented Reality to Transform Middle Level Social Studies Education** Developing, implementing, refining, and disseminating techniques for low-threshold uses of augmented reality in middle level social studies classrooms. Faculty research grant (\$2,500).
- 2007 **Developing Middle School Students' Geospatial Skills in a Technology Class.** Developing, implementing, refining, and disseminating an innovative curriculum that incorporates' students use of global position systems and geographic information systems to conduct an inquiry and analysis of the local environment. Yielded three manuscripts in print, one under review. Faculty research grant (\$2,500).

Editor/Editorial Review Board Membership for Scholarly Publications

- 2015- Consulting Editor, *Educational Technology Research & Development*
 2009-2014 Section Editor, *Contemporary Issues in Technology and Teacher Education*
 General section
 2008-present Editorial Board Member, *Journal of Research on Technology in Education*

Scholarly Presentations

Invited State or Local Presentations/Lectures/Workshops

Hammond, T.C., Davis, T.D., Bonilla, H., Little, K., & Salter, S. (October, 2019). *Put to the Test: Act 35 and the Future of Civic Education in Pennsylvania*. Presentation at the annual conference of the Pennsylvania Council for the Social Studies (PCSS), Harrisburg, PA.

Hammond, T.C., & Oltman, J.L. (2015, October). *Community Needs, Community Resources: A 21st Century Approach to the Elementary Social Studies Classic*. Presentation at the Teaching, Learning, and Technology Summit, Bethlehem, PA.

Hammond, T.C., & Oltman, J.N. (2015, October). *Games, Narratives, & Interactive Conceptual Models in Scratch*. Presentation at the Teaching, Learning, and Technology Summit, Bethlehem, PA.

Hammond, T. (2014, October). *Take it Outside: GPS for Geography & Local Inquiry*. Presentation at the Mobile Teaching & Learning Summit, Bethlehem, PA.

Manfra, M.M., & Hammond, T.C. (2011, September). “*Something That Matters*” *Action Research as Professional Development for Teachers*. Presented at the Friday Institute, North Carolina State University, Raleigh, NC.

Hammond, T. (2011, August). *SmartBoards and Document Cameras to Enhance Instruction*. Presented at the IPDS Summer Institute, Broughal Middle School, Bethlehem, PA.

Hammond, T. (2009, October). *Teaching Without a Textbook...With Technology*. Presented as a Keynote at the conference of the Indiana Council for the Social Studies, Lafayette, IN.

Hammond, T. (2009, October). *Digital Primary Sources*. Presented as a Breakout at the conference of the Indiana Council for the Social Studies, Lafayette, IN.

Hammond, T.C. (2009, June). *Primary Access: Overview of Research and Directions for Future Study*. Presented at the James F. Ackerman Center for Democratic Citizenship Colloquium on Technology and Citizenship, Purdue University, West Lafayette, IN.

Hammond, T.C. (2009, June). *GIS and Google Earth in Light-Weight, Scaffolded Approaches to Geospatial Tools & Inquiry*. Presented at the James F. Ackerman Center for Democratic Citizenship Colloquium on Technology and Citizenship, Purdue University, West Lafayette, IN.

Bull, G., Hammond, T., & Alexander, C. (2008, October). *Student Creation of Digital Documentaries in History Classrooms: Research Findings*. Presented as a Lecture in the Prove It strand of the K12 Online Conference.

Hammond, T. (2008, September). *Integrating Technology Into Classroom Instruction*. Workshop at the Union School, Port-au-Prince, Haiti.

Hammond, T. (2008, September). *Introduction to SmartBoards*. Workshop at the Centennial School, Lehigh University, Bethlehem, PA.

Manfra, M., & Hammond, T. (2008, September). *PrimaryAccess: Digital Documentaries*. Presented to the New Literacies Collaborative meeting at the Friday Institute, North Carolina State University, Raleigh, NC.

Hammond, T. (2008, May). *Google Earth, GPS, and KML via Geospatial Inquiry*. Presented to the Lehigh Valley Computer Science Teachers Association meeting, Lehigh University, Bethlehem, PA.

Hammond, T. (2008, March). *Geocaching and Geospatial Inquiry with GPS, Google Earth, and GIS: Modeling Technology Integration*. Presented to the Kuwaiti Principals' Training Institute, Lehigh University, Bethlehem, PA.

Hammond, T. (2008, June). *Integrating Digital Primary Sources in the Classroom*. Workshop at the James F. Ackerman Center for Democratic Citizenship Teacher Training Institute, Purdue University, West Lafayette, IN.

Hammond, T. (2007, July). *Reflective, Competent, and Concerned Citizens in the History Classroom: Seventh-grade Students' Inclusion of Citizenship Themes in Digital History Project*. Presented at the James F. Ackerman Center for Democratic Citizenship Colloquium on Technology and Citizenship, Purdue University, West Lafayette, IN.

Hammond, T. (2007, February). *Persistent Issues in the K-12 History Curriculum*. Presented in HIUS 401, "Digital History Seminar," University of Virginia, Charlottesville, VA.

Bull, G., & Hammond, T. (2007, February). *Teaching with Digital Images*. Online interactive seminar hosted by the International Society for Technology in Education.

Hammond, T. (2006, September). *Online Rubrics & Rating Systems*. Presented at the National Technology Leadership Summit, Washington, DC.

Hammond, T. (2006, August). *Teaching with Student-Created Online Digital Video Using PrimaryAccess & DigitalStoryteller*. Presented at Arlington Public Schools, Arlington, VA.

Refereed Presentations at International Conferences

Hammond, T.C., Bodzin, A.M., & Salter S. (2019, November). *Geography and Civic Inquiry: Spatial Analysis of the Built Environment*. Presented as a session at the annual conference of the National Council for the Social Studies (NCSS), Austin, TX.

Hammond, T.C., & Manfra, M.M. (2019, November). *Computational Thinking and Inquiry-Based Education in the Social Studies*. Research Into Practice session presented at the annual conference of the National Council for the Social Studies (NCSS), Austin, TX.

Hammond, T.C., Bodzin, A.M., & Salter, S. (2019, November). *Tools for Geographic Inquiry: Data to Map to Story*. Workshop presented at the annual conference of the National Council for the Social Studies (NCSS), Austin, TX.

Hammond, T.C., Salter, S., & Bodzin, A. (2019, November). *From STEM Education to Civic Engagement: Localized Geographic Inquiry Taking Students Beyond the Classroom*. Presented as a paper at the annual meeting of the College and University Faculty of the National Council for the Social Studies (CUFA-NCSS), Austin, TX.

Hammond, T.C., Oltman, J.L., & Manfra, M.M. (2019, November). *Geo-Computational Thinking in the Third Grade: Making Computational Thinking Truly “For Everyone, Everywhere”*. Paper presented at 27th ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems Workshop on Geo-Computational Thinking in Education (GeoEd 2019), Chicago, IL.

Bodzin, A., Popejoy, K., Hammond, T., Anastasio, D., Holland, B., & Sahagian, D. (January, 2019). *A Design Partnership to Support Teachers’ Adoption of Technology-Integrated Curriculum*. Paper presented at the 2019 Association for Science Teacher Education (ASTE) Annual Meeting in Savannah, GA.

Bodzin, A., Anastasio, A., Sahagian, D., Popejoy, K., Hammond, T., Holland, B., & Rutzmoser, S. (December, 2018). *A Design Partnership for Socio-Environmental Science Investigations*. Presented at the 2018 American Geophysical Union (AGU) annual meeting in Washington, DC. Invited presentation.

Bodzin, A., Anastasio, D., Vallera, F., Hammond, T., Rutzmoser, S., & Araujo Junior, R. M. (December, 2018). *Developing an Immersive Virtual Reality Environment to Explore the Lehigh Gap*. Presentation presented at the 2018 American Geophysical Union (AGU) annual meeting in Washington, DC.

Sahagian, D., Bodzin, A., Anastasio, A., Popejoy, K., Hammond, T., Holland, B., Rutzmoser, S., Farina, W., Salter, S., & Hanson, I. (December, 2018). *Using Geospatial Technologies Inside and Outside the High School Classroom to Enhance Understanding of Socio-Environmental Concepts in an Urban Environment*. Poster presented at the 2018 American Geophysical Union (AGU) annual meeting in Washington, DC.

Anastasio, A., Bodzin, A., Carrigan, J., Farina, W., Hammond, T., Holland, B., Araujo Junior, R. M. Popejoy, K., Rutzmoser, S., & Sahagian, D. (December, 2018). *Interdisciplinary Capstone Projects Provide Authentic Career Experience During Socio-Environmental Science Investigations (SESI) Geospatial Curriculum Approach*. Poster presented at the 2018 American Geophysical Union (AGU) annual meeting in Washington, DC.

Carrigan, J., Anastasio, D., Bodzin, A., Popejoy, K., Hammond, T., Salter-Burghardt, S., Hanson, I., Rutzmoser, S., and Farina, W., Holland, B., & Sahagian, D. (October, 2018). *Local Mentor Partnership in an Urban High School to Promote Post-Secondary Career Paths*. Presentation presented at the 2018 Geological Society of America annual meeting in Indianapolis, IN.

Rutzmoser, S., Bodzin, A., Hammond, T., Popejoy, K., Farina, W., Araujo Jr., R., Carrigan, J., Hanson, I., & Salter, S. (October, 2018). *The Do’s and Don’ts - Using GIS Tools in the*

Secondary Classroom. Presentation presented at the URISA GIS-Pro & CalGIS Conference, Palm Springs CA.

Bodzin, A., Popejoy, K., Hammond, T., Anastasio, D., Holland, B., Sahagian, D., Rutzmoser, S., Carrigan, J., & Farina, W. (July, 2018). *Socio-Environmental Science Investigations: Hands-on Active Learning with Geospatial Technologies*. Paper presented at the 2018 Hands-on Science Conference (HSCI) in Barcelona, Spain.

Bodzin, A., Anastasio, D., Hammond, T., Holland, B., Popejoy, K., Rutzmoser, S., Sahagian, D., and Fu, Q. (May, 2018). *Socio-Environmental Science Investigations Using the Geospatial Curriculum Approach With Web GIS*. Poster presented at the 2018 NSF ITEST Principal Investigator and Evaluator Summit in Alexandria, VA.

Bodzin, A., Hammond, T.C., Popejoy, K., Farina, W., Anastasio, D., Holland, B., Carrigan, J., Rutzmoser, S., & Sahagian, D. (2018, March). *A Curriculum-linked Professional Development Approach to Support Teachers' Adoption of Socio-Environmental Science Investigation*. Invited paper receiving the National Technology Leadership Initiative Award at the conference of the Society for Information Technology and Teacher Education (SITE), Alexandria, VA.

Hammond, T.C., & Bodzin, A. (2018, March). *Articulating a Novice-Expert Paradigm For GIS Use in Secondary Science and Social Studies Classrooms*. Presented as a Full Paper at the conference of the Society for Information Technology and Teacher Education (SITE), Alexandria, VA.

Hammond, T.C., Oltman, J., & Alexander, R.C. (2018, March). *Enhancing Early Elementary Civics Education Through Augmented Reality Games*. Presented as a Brief Paper at the conference of the Society for Information Technology and Teacher Education (SITE), Alexandria, VA.

Bodzin, A., Popejoy, K., Carrigan, J., Rutzmoser, S., Anastasio, D., Hammond, T., Holland, B., Sahagian, D., & Farina, W. (March, 2018). *Using Web GIS and iPads for Socio-Environmental Science Investigations*. ASTE sponsored session. Paper presented at the 2018 National Science Teachers Association (NSTA) National Conference on Science Education in Atlanta, GA.

Bodzin, A., Hammond, T., Popejoy, K., Farina, W., Rutzmoser, S., Anastasio, D., Holland, B., Carrigan, J., Rutzmoser, S., & Sahagian, D. (January, 2018). *A Curriculum-Linked Professional Development Approach to Support Teachers' Adoption of Socio-Environmental Science Investigations*. Paper presented at the 2018 Association for Science Teacher Education (ASTE) Annual Meeting in Baltimore, MD. (Recipient of the National Technology Leadership Institute award from ASTE.)

Popejoy, K., Hammond, T., Bodzin, A., Farina, W., Anastasio, D., Holland, B., Carrigan, J., & Sahagian, D. (January, 2018). *Using GIS Tools to Investigate Socio-Environmental Science in the Secondary Classroom: Exploring the Urban Heat Island Effect*. Experiential session presented at the 2018 Association for Science Teacher Education (ASTE) Annual Meeting in Baltimore, MD.

Bodzin, A., Carrigan, J., Anastasio, D., Popejoy, K., Hammond, T., Holland, B., Sahagian, D., Rutzmoser, S., & Farina, W. (October, 2017). *Socio-Environmental Science Investigations That Support NGSS Teaching and Learning*. Presentation presented at the 2017 Geological Society of America annual meeting in Seattle, WA.

Carrigan, J., Bodzin, A., Anastasio, D., Popejoy, K., Hammond, T., Sahagian, D., Holland, B., Rutzmoser, S., & Farina, W. (October, 2017). *A Professional Development Approach for Teaching Socio-Environmental Science Investigations With Mobile Geospatial Technologies*. Poster presented at the 2017 Geological Society of America annual meeting in Seattle, WA.

Oltman, J., & Hammond, T.C. (2017, April). *"I Almost Wanted to Touch Them!" Curriculum-Embedded Game-Based Learning for Young Elementary History Education*. Presented as part of a Symposium at the annual meeting of the American Educational Research Association (AERA), San Antonio, TX.

Hammond, T.C., & Stanlick, S.E. (2017, March). *Civic Engineering: A Conceptual Framework for Civics Education in the 21st Century*. Presented as a Brief Paper at the annual conference of the Society for Information Technology and Teacher Education (SITE), Austin, TX.

Stanlick, S.E., & Hammond, T.C. (2017, March). *Digital Tools, Data, and Civic Hacking as a Vehicle for Place-Based Storytelling and Social Change*. Presented as a Brief Paper at the annual conference of the Society for Information Technology and Teacher Education (SITE), Austin, TX.

Oltman, J., & Hammond, T.C. (2016, June). *Moravian History Mystery: Elementary Game-Based Learning About Colonial America*. Presented as a Research Paper at the annual conference of the International Society for Technology in Education (ISTE), Denver, CO.

Hammond, T.C., Jansen, D.K., & Oltman, J.N. (2016, June). *Teaching Humanities With Interactive Conceptual Models in Scratch*. Presented as a Poster at the annual conference of the International Society for Technology in Education (ISTE), Denver, CO.

Hammond, T.C. (2016, March). *A Geospatial Approach to Teachers' Diversity Education*. Presented as a Best Practice at the conference of the Society for Information Technology and Teacher Education (SITE), Savannah, GA.

Hammond, T.C., & Oltman, J. (2016, March). *The Sleeping Giant Awakens? Two Cases in Geospatial Tools Re-Shaping Curricular Content in Elementary Social Studies*. Presented as a Paper at the conference of the Society for Information Technology and Teacher Education (SITE), Savannah, GA.

Hammond, T.C., Oltman, J., & Mendez Martinez, D. (2015, June). *Inside, Outside, Between: Recipes for Augmented Reality in Social Studies*. Presented as a Poster at the conference of the International Society for Technology in Education, Philadelphia, PA.

Rosenblum, R., & Hammond, T.C. (2015, June). *Conceptual Interactivity: A Content-Specific Model for Teacher Development on Interactive Whiteboards*. Presented as a Research Paper at the conference of the International Society for Technology in Education, Philadelphia, PA.

Baker, T.R., & Hammond, T.C. (2015, March). *K-12 Geospatial Tools and ArcGIS Online in the Age of the White House ConnectED Initiative*. Presented as a Workshop at the annual meeting of the Society for Information Technology and Teacher Education, Las Vegas, NV.

Rosenblum, R., & Hammond, T.C. (2015, March). *Middle Level Special Education Teachers' Adoption of Interactive Whiteboards in Social Studies Instruction*. Presented as a Brief Paper at the annual meeting of the Society for Information Technology and Teacher Education, Las Vegas, NV.

Hammond, T., Langran, E. & Baker, T. (2014, March). *Survey of Geospatial Information Technologies in Teacher Education*. Presented as a Full Paper at the conference of the Society of the Information Technology and Teacher Education (SITE), Jacksonville, FL.

Hammond, T.C., & Rosenblum, R.B. (2013, March). *Teacher Adoption of Geospatial Tools in Special Needs Secondary History Classrooms: Case Studies*. Presented as a Brief Paper at the conference of the Society of the Information Technology and Teacher Education (SITE), New Orleans, LA.

Friedman, A., Hammond, T., VanFossen, P., & List, J. (2012, November). *Embracing the Inevitable? iPad Apps to Enhance Social Studies Curricula*. Presented as a Lecture at the conference of the National Council for the Social Studies (NCSS), Seattle, WA.

Hammond, T.C. (2012, November). *Curriculum & Technology in Dialog Transforming the History Curriculum with Geospatial Tools*. Presented within a Symposium at the conference of the College and University Faculty Association of the National Council for the Social Studies (CUFA/NCSS), Seattle, WA.

Shameem, A., & Hammond, T.C. (2012, March). *Technology in Context: The Case of Teachers' Attitudes Towards Technology in the Maldives*. Presented as a Paper at the conference of the Society for Information Technology and Teacher Education (SITE), Austin, TX.

Alibrandi, M., Baker, T., Langran, E., Hammond, T., Zalles, D. & Nagel, P. (2012, March). *Developing a Curricular Sequence for K-16 Geospatial Integration*. Presented as a panel at the conference of the Society for Information Technology and Teacher Education (SITE), Austin, TX.

Manfra, M., & Hammond, T.C. (2012, April). *Action Research and the Professional Knowledge of Novice and Experienced Social Studies Teachers*. Presented as a Paper at the annual meeting of the American Educational Research Association (AERA), Vancouver, British Columbia.

Stanlick, S., & Hammond, T.C. (2011, November). *Service Learning and Undergraduates: Exploring Connections between Ambiguity Tolerance, Empathy, and Motivation in the Context of Service Trips*. Presented in the Graduate Student Roundtables at the conference of the College

and University Faculty Association of the National Council for the Social Studies (CUFA/NCSS), Washington, DC.

Swan, K., Hofer, H., Fehn, B., Manfra, M., Hammond, T.C., & Schul, J. (2011, November). *The Implications of Current Research on Desktop Documentary Making in History Classrooms*. Presented as a Symposium at the conference of the College and University Faculty Association of the National Council for the Social Studies (CUFA/NCSS), Washington, DC.

Sheffield, C., Dinkelman, T., Hammond, T.C., Grimes, P., Marri, A., Berson, M., Merryfield, M. (2011, November). *Holocaust Education: Instructional Implications and Opportunities*. Presented as a Panel at the conference of the College and University Faculty Association of the National Council for the Social Studies (CUFA/NCSS), Washington, DC.

Manfra, M., & Hammond, T.C. (2011, November). *Teacher Research in the Social Studies Classroom: In-service and Pre-service Outcomes*. Presented as a Paper at the conference of the College and University Faculty Association of the National Council for the Social Studies (CUFA/NCSS), Washington, DC.

Hammond, T.C., & Snyder, J.W. (2011, June). *Now I See It! Teaching Early U.S. History with GIS*. Presented as a Poster at the conference of the International Society for Technology in Education (ISTE), Philadelphia, PA.

Hammond, T.C., & Langran, L. (2011, March). *Geospatial Tools and Social Studies Teacher Education: Case Studies*. Presented as a Brief Paper at the conference of the Society for Information Technology and Teacher Education (SITE), Nashville, TN.

Hammond, T.C., & Lee, J.K. (2011, March). *Film in Social Studies Teacher Education: Practices, Purposes, and Paradigms*. Presented as a Brief Paper at the conference of the Society for Information Technology and Teacher Education (SITE), Nashville, TN.

Hammond, T.C., Alexander, C., & Scott, D. (2010, November). *Doing Local History with Web 2.0*. Presented as a Lecture at the conference for the National Council for the Social Studies (NCSS), Denver, CO.

Kearns, M., & Hammond, T.C. (2010, November). *Teaching Latitude and Longitude with GPS*. Presented as a Roundtable at the conference for the National Council for the Social Studies (NCSS), Denver, CO.

Calario, S., & Hammond, T.C. (2010, November). *Geospatial Tools and Community Inquiry in Middle School*. Presented as a Roundtable at the conference for the National Council for the Social Studies (NCSS), Denver, CO.

Hammond, T.C., & Manfra, M.M. (2010, May). *Teaching History with Digital Documentaries: Understanding Student Perceptions*. Presented as a Paper Discussion at the American Educational Research Association (AERA) annual meeting, Denver, CO.

Hammond, T.C., Lee, J.K., Manfra, M.M., Friedman, A.M., & Keeler, C.G. (2009, November). *Historical Thinking as Applied Epistemology*. Presented as a Paper at the conference of the College and University Faculty Association of the National Council for the Social Studies (CUFA/NCSS), Atlanta, GA.

Hammond, T.C., & Manfra, M.M. (2009, November). *Teaching History with Digital Documentaries: Understanding Student Perceptions*. Presented as a Paper at the conference of the College and University Faculty Association of the National Council for the Social Studies (CUFA/NCSS), Atlanta, GA.

Ferster, B., & Hammond, T.C. (2009, November). *Building History in the College Classroom: Thomas Jefferson's Travels*. Presented as a Clinic at the conference of the National Council for the Social Studies (NCSS), Atlanta, GA.

Hammond, T.C., Manfra, M.M., & Stanlick, S.E. (2009, November). *Thirteen Ways of Looking at Wikipedia: Beyond (Mis)Information*. Presented as a Poster at the conference of the National Council for the Social Studies (NCSS), Atlanta, GA.

Hammond, T., Ferster, B., & Manfra, M. (2009, June). *Showing, Inquiring, and Doing History: Thinking Deeply With Web-Based Tools*. Presented as a Lecture at the National Educational Computing Conference (NECC), Washington, DC.

Hammond, T., & Lee, J. (2009, June). *Teaching With Digital Video in the Social Studies Classroom*. Presented as a Lecture at the National Educational Computing Conference (NECC), Washington, DC.

Hammond, T., Keeler, C., Manfra, M., Lee, J., & Friedman, A. (2009, April). *Epistemology Is Elementary: Historical Thinking in Social Studies Methods Courses via Critical Inquiries of Wikipedia Entries*. Presented as a Paper Discussion at the American Educational Research Association (AERA) annual meeting, San Diego, CA.

Manfra, M., Friedman, A., Hammond, T., Lee, J. (2009, March). *Peering Behind the Curtain: Digital History, Historiography, and Secondary Social Studies Methods*. Presented as a Brief Paper at the Society for Information Technology and Teacher Education (SITE) annual conference, Charleston, SC.

Lee, J., & Hammond, T. (2009, March). *Watching, Analyzing, and Creating: Teachers using Digital Video in Social Studies*. Presented as a Panel at the Society for Information Technology and Teacher Education (SITE) annual conference, Charleston, SC.

Hammond, T., Friedman, A., & Manfra, M. (2008, June). *Wikipedia in the Social Studies Classroom: Beyond Information Seeking*. Presented as a Lecture at the National Educational Computing Conference (NECC), San Antonio, TX.

Hammond, T., & Manfra, M. (2008, June). *Sharing Designs: Student Creation of Digital Documentaries with Primary Access*. Presented as a Workshop at the National Educational Computing Conference (NECC), San Antonio, TX.

Hammond, T. (2008, March). *"So what?" Students' Articulation of Civic Themes in Middle-School Digital Documentary Projects*. Presented as a Brief Paper at the conference of the Society for Information Technology and Teacher Education (SITE) annual conference, Las Vegas, NV.

Hammond, T. (2008, March). *Scaffolded vs. Unscaffolded Digital History Projects: A Quasi-Experiment in a Middle School History Classroom*. Presented as a Brief Paper at the conference of the Society for Information Technology and Teacher Education (SITE) annual conference, Las Vegas, NV.

Hammond, T., Manfra, M., Friedman, A., Keeler, C., & Metan, D. (2008, March). *Epistemology Is Elementary: Historical Thinking as Applied Epistemology in an Elementary Social Studies Methods Class*. Presented as a Brief Paper at the conference of the Society for Information Technology and Teacher Education (SITE) annual conference, Las Vegas, NV.

Park, J., & Hammond, T. (2008, March). *An Updated Approach to Using Digital Video in Content Area Education, Part 1*. Presented as Symposium at the conference of the Society for Information Technology and Teacher Education (SITE) annual conference, Las Vegas, NV.

Park, J., & Hammond, T. (2008, March). *An Updated Approach to Using Digital Video in Content Area Education, Part 2*. Presented as a Symposium at the conference of the Society for Information Technology and Teacher Education (SITE) annual conference, Las Vegas, NV.

Alexander, C., Broome, J., & Hammond, T. (2008, March). *TPCK and the Wisdom of Practice: The Impact of Field Trials on Digital History Projects Using PrimaryAccess*. Presented as a Brief Paper at the Society for Information Technology and Teacher Education (SITE) annual conference, Las Vegas, NV.

Manfra, M., & Hammond, T. (2007, November). *Teachers' Instructional Choices with Student-created Digital Documentaries: Case Studies*. Presented as a Paper at the conference of the College and University Faculty Association of the National Council for the Social Studies in San Diego, CA.

Hammond, T. (2007, June). *Defining a Technology-supportive Environment: Preparing a Foundation for Research*. Presented as a Panel at the National Educational Computing Conference (NECC), Atlanta, GA.

Bull, G., & Hammond, T. (2007, June). *PrimaryAccess: Creating Digital Documentaries in the Social Studies Classroom*. Presented as a Workshop at the National Educational Computing Conference (NECC), Atlanta, GA.

Alexander, R.C., Hammond, T., Jinks, S., & Pipes, D. (2007, April). *The Effectiveness of an Online Collaborative Seminar in Advancing a Research Agenda*. Presented as an Individual Paper at the American Educational Research Association annual meeting, Chicago, IL.

Hammond, T., & McGlenn, M. (2007, March). *Digital Historical Narratives and the Social Studies Curriculum: Student Outcomes in Virginia Classrooms Using PrimaryAccess*. Presented

as a Brief Paper at the Society for Information Technology and Teacher Education (SITE) annual conference, San Antonio, TX. [Cross-referenced above in “Articles in Conference Proceedings” section.]

Hammond, T., & McGlenn, M. (2007, March). *PrimaryAccess: A Web 2.0 Digital Narrative Toolkit for History Education*. Presented as a Tutorial at the Society for Information Technology and Teacher Education (SITE) annual conference, San Antonio, TX.

Schrum, L., & Hammond, T. (2007, March). *SITE Fireside Chat #2: Issues and Strategies for Mentoring Doctoral Students in Instructional Technology*. Presented as a Panel at the Society for Information Technology and Teacher Education (SITE) annual conference, San Antonio, TX. [Cross-referenced above in “Articles in Conference Proceedings” section.]

Grimes, P., & Hammond, T. (2007, March). *Teaching Beyond State Standards: Using Technology to Enhance Elementary Teachers’ Social Studies Preparation*. Presented as a Roundtable at the Society for Information Technology and Teacher Education (SITE) annual conference, San Antonio, TX. [Cross-referenced above in “Articles in Conference Proceedings” section.]

Pipes, D., Murphy, J., Midland, S., Alexander, C., Downey, B., Kelley, M., & Hammond, T. (2007, March). *Using Digital Video Across the Disciplines*. Presented as a Panel at the Society for Information Technology and Teacher Education (SITE) annual conference, San Antonio, TX.

Schrum, L., Bielefeldt, T., Magner, T., Hammond, T., & Albaugh, S. (2006, July). *Facilitating Effective Technology Research in the Core Content Areas*. Presented as a Concurrent Session at the National Educational Computing Conference (NECC), San Diego, CA.

Pierson, M., Albaugh, S., Christensen, R., Hammond, T., Kajder, S., Knezek, G., & Neiss, M. (2006, July). *Developing Key Research Questions for Technology and Core Content Disciplines*. Presented as a Concurrent Session at the National Educational Computing Conference (NECC), San Diego, CA.

McGlenn, M., Hammond, T., Friedman, A., Bolick, C. M., Bull, G., Ferster, B. Hicks, D., Lee, J., Calandra, B., Doolittle, P., Ewing, T. (2006, March). *Digital History in Social Studies Teacher Education: Practices, Promises, and Provisos, Part 1*. Presented as a Symposium at the Society for Information Technology and Teacher Education (SITE) annual conference, Orlando, FL.

McGlenn, M., Hammond, T., Friedman, A., Bolick, C. M., Bull, G., Ferster, B. Hicks, D., Lee, J., Calandra, B., Doolittle, P., Ewing, T. (2006, March). *Digital History in Social Studies Teacher Education: Practices, Promises, and Provisos, Part 2*. Presented as a Symposium at the Society for Information Technology and Teacher Education (SITE) annual conference, Orlando, FL.

Teaching and Research Advising

Courses taught at Lehigh (all graduate)

- Spring '18 • TLT 476: Assessment of Instructional Technologies (14 enrolled)
- Fall '17 • TLT 412: Social Studies in PreK through 4th Grade (11 enrolled)
- Spring '17 • TLT 403: Instructional Design (16 enrolled)
- Fall '16 • TLT 412: Social Studies in PreK through 4th Grade (11 enrolled)
- Summer '16 • ES/TLT 368: Teaching and Learning With Geospatial Tools (18 enrolled)
- SPED/TLT 404: Diversity, Families, and School Collaborations in K-12 (30 enrolled)
- Spring '16 • TLT 403: Instructional Design (21 enrolled)
- TLT 431: Social Studies in Middle and Secondary Education (4 enrolled)
- Winter '15 • ES/TLT 368: Teaching and Learning With Geospatial Tools (enrolled)
- Fall '15 • SPED/TLT 404: : Diversity, Families, and School Collaborations in K-12 (18 enrolled)
- Social Studies in Elementary Education (10 enrolled)
- Summer '15 • ES/TLT 368: Teaching and Learning With Geospatial Tools (7 enrolled)
- SPED/TLT 404: : Diversity, Families, and School Collaborations in K-12 (15 enrolled)
- Spring '15 • ES/TLT 368: Teaching and Learning With Geospatial Tools (10 enrolled)
- TLT 403: Instructional Design (16 enrolled)
- Fall '14 • TLT 412: Social Studies in PreK through 4th Grade (14 enrolled)
- TLT 431: Social Studies in Middle and Secondary Education (revisions to assignments, refinement of demonstration lessons; 9 enrolled)
- Summer '14 • ES/TLT 368: Teaching and Learning with Geospatial Tools (revisions to assignments, activities, and lectures; 9 enrolled)
- SPED/TLT 404: Diversity, Families, and School Collaborations in K-12 (11 enrolled)
- Spring '14 • EDUC 496: Doctoral Research Seminar: Multi-Disciplinary Research Design in Learning (new course; 7 enrolled)
- Fall '13 • (on academic leave)

- Summer '13 • ES/TLT 368: Teaching and Learning with Geospatial Tools (revisions to assignments, activities, and lectures; 12 enrolled)
- Spring '13 • SPED/TLT 404: Diversity, Families, and School Collaborations in K-12 (18 enrolled)
• TLT 431: Social Studies in Middle and Secondary Education (revisions to assignments, refinement of demonstration lessons; 5 enrolled)
- Fall '12 • SPED / TLT 404: Diversity, Families, and School Collaborations in K-12 (revisions to lectures, activities; 17 enrolled)
• TLT 412: Social Studies in PreK through 4th Grade (revisions to lectures; 6 enrolled)
- Summer '12 • ES 368 / TLT 368: Teaching and Learning with Geospatial Tools (refinement of lectures; 14 enrolled)
• SPED / TLT 404: Diversity, Families, and School Collaborations in K-12 (new preparation; 19 enrolled)
- Spring '12 • TLT 431: Social Studies in Middle and Secondary Education (revisions to assignments, refinement of demonstration lessons; 9 enrolled)
• TLT 444: Intern Teaching Seminar (21 enrolled)
- Fall '11 • TLT 412: Social Studies in Elementary Education (revisions to assignments, refinement of demonstration lessons; 20 enrolled)
• TLT 444: Intern Teaching Seminar (8 enrolled)
- Summer '11 • ES 394 / TLT 394: Teaching and Learning with Geospatial Tools (refinement of lectures; 10 enrolled)
- Spring '11 • TLT 412: Social Studies in Elementary Education (revisions to assignments, refinement of demonstration lessons; 18 enrolled)
• TLT 444: Intern Teaching Seminar (27 enrolled)
- Fall '10 • TLT 431: Social Studies in Middle and Secondary Education (revised lectures, assignments, syllabus, readings; 13 enrolled)
• TLT 444: Intern Teaching Seminar (new prep; 5 enrolled)
- Summer '10 • TLT 406: Tools for Teaching and Learning (refinement of assignments and readings; 17 enrolled)
• ES 394 / TLT 394: Teaching and Learning with Geospatial Tools (refinement of lectures; 9 enrolled)
- Spring '10 • TLT 412: Social Studies in Elementary Education (revisions to assignments, refinement of demonstration lessons; 12 enrolled)
• TLT 492: Classroom Research Methods (new course, new prep; 11 enrolled)

- Fall '09
- TLT 412: Social Studies in Elementary Education (revisions to assignments and development of wider array of demonstration lessons; 15 enrolled)
 - TLT 431: Social Studies in Middle and Secondary Education (significantly revised assignments, syllabus, readings, changed textbook; 10 enrolled)
- Summer '09
- TLT 406: Tools for Teaching and Learning (new prep; revision of assignments and technologies used to increase emphasis on Web 2.0; 20 enrolled)
 - ES 394 / TLT 394: Teaching and Learning with Geospatial Tools (new course, new prep; 9 enrolled)
- Spring '09
- (no teaching; on family leave)
- Fall '08
- TLT 412: Social Studies in Elementary Education (minor modifications to course; 16 enrolled)
 - TLT 450: Technology in School Settings (re-designed course, introduced writing-to-learn components, re-designed field projects, introduced scaffolds for writing and project work; 15 enrolled)
- Summer '08
- TLT 412: Social Studies in Elementary Education (minor modifications to course; 14 enrolled)
 - TLT 470: Integrating Technology in the Classroom (new course, new prep; 17 enrolled)
- Spring '08
- TLT 412: Social Studies in Elementary Education (re-designed course to improve adherence to PDE criteria, changed textbook, syllabus, readings, and assignments; 21 enrolled)
 - TLT 431: Social Studies in Middle and Secondary Education (new prep, redesigned course to introduce hybrid face-to-face and distance-education elements and implement Web 2.0 tools such as wikis, blogs, and social bookmarks; 3 enrolled)
- Fall '07
- TBTE 415: Technology in School Settings (new prep, redesigned course to introduce hybrid face-to-face and distance-education elements and implement Web 2.0 tools such as wikis, blogs, and social bookmarks; 17 enrolled)
- Summer '07
- TBTE 412-10: Curriculum and Instruction in Social Studies (Elementary section) (new prep, redesigned course to introduce hybrid face-to-face and distance-education elements, include greater emphasis on technology integration for social studies, and implement Web 2.0 tools such as wikis and social bookmarks; 12 enrolled)

Research Direction

Qualifying Research Chair

- Rosenblum, Richard *Middle Level Special Education Teachers' Adoption and Use of Interactive Whiteboards in Social Studies Instruction* (completed February, 2016)
- Oltman, Julia *Moravian History Mystery: A Mobile, Digital, Augmented Reality, Geospatial, Game-Based Learning Experience for Young Elementary Students* (completed October, 2015)
- Shameem, Ali *Maldives Teachers Attitudes Toward Technology* (completed August, 2011).
- Stanlick, Sarah E. *Service Learning and Undergraduates: Exploring Connections Between Ambiguity Tolerance, Empathy, and Motivation* (completed September, 2011).

Dissertation Chair

- Zhang, Yuanyuan *Higher Education Faculty's Instructional Decision Making Practices in Strongly Affective Versus Strongly Cognitive and/or Behavioral Contexts* (defended proposal)
- Oltman, Julia L. *The Game Effect: Embedding Augmented Reality Game-Based Learning Within an Early Elementary Social Studies Curriculum* (completed July, 2018)
- Shameem, Ali *Influence of Culture on Teachers' Attitudes Towards Technology* (completed December, 2016)
- Stanlick, Sarah E. *Quality and Directionality of Global Citizenship Identity Development in the Context of Online and Offline Reflections During an Introductory Global Citizenship Course* (completed April, 2015).
- Zhao, Xiaoli *Towards a Systematic Understanding of Community in Online Learning* (completed April, 2014).

Dissertation Committee Member

- Wallace, Duane *Creating Citizen Science Identity: Growing Conservation and Environmentally-Minded STEM Interest Through Mobile Learning and Authentic Practice* (defended proposal)
- Kuscenko, Daria *Supporting Collaborative Writing in Secondary Language Arts: A Revision Decision Model Intervention* (completed December, 2017)
- Kotsko, Adrienne *A Professional Learning Community Approach to Improving English/Language Arts Instructional Planning* (completed August, 2017)

- Reed, Rajika *Using Geospatial Thinking and Reasoning Skills to Examine Vector Borne Disease Transmission Through Web GIS in Undergraduate Students Studying Public Health* (completed April, 2017)
- Aragona-Young, Emily *Developing Equity Literacy: A Collaborative Approach* (completed April, 2017)
- Marsteller, Robert *Making Online Learning Personal: Evolution, Evidentiary Reasoning, and Self-Regulation in an Online Curriculum* (completed April, 2017)
- Mockrish, Ted *Links Between Principal Intercultural Competency and Teacher Trust in EARCOS International Schools* (completed October, 2016)
- Vallera, Farah *Weaving More Than Just Fibers: Integrating a Fully Stem-Focused, Project-Based Agricultural Literacy Module Into Elementary Curricula* (completed December, 2015)
- Adams, Cynthia *Effects of Interactive Online Instruction in Science Writing on the Development of Critical Analysis Skills in College Science Students* (completed April, 2015)
- Bressler, Denise *Is It All In The Game? Flow Experience and Scientific Practices During an Inplace Mobile Game* (completed April, 2014).
- Price, Darren *Teacher Efficacy & Institutional Change with 1:1 Technology Initiatives in East Asia* (completed April, 2014).
- Starkey, Pilar *The Effects of Digital Games on Middle School Students' Mathematical Achievement* (completed April, 2013).
- Cauller, Tim *Toward an Improved Model of Education: Maria Montessori, Karl Popper, and the Evolutionary Epistemology of Human Learning* (completed November, 2011).

Advising: Other than Research Direction (all graduate)

Academic Advisees: Currently serve as advisor to 7 doctoral students, 15 master's students, and 5 undergraduates enrolled in the 5-year Bachelor's plus Master of Education and Teacher Certification Program.

Recruitment: Currently serve as main contact for prospective social studies education students and Lehigh undergraduates interested in teacher certification.

Service

University Service

- 2019 Member, Global Citizenship Professor of Practice search committee
- 2019 Member, Library & Technology Services Geospatial Data and Visualization Specialist search committee
- 2018- Member, *ad hoc* Building Committee, College of Business and Economics
- 2017-18 Member, Data Governance Executive Committee
- 2017-2018 Member, *ad hoc* Professor of Practice committee
- 2016-2018 Member, American Council on Education (ACE) Internationalization Laboratory strategy committee
- 2016- Member, university *Classroom Committee*
- 2016 Member, *ad hoc* Task Force on Graduate Education
- 2013 Member, Provost's performance review committee for Gary Sasso, Dean of the College of Education
- 2012-present Member, *University Disciplinary Appeals Committee*

College/Interdisciplinary/Departmental Service

- 2019 Member, Urban Principals Academy at Lehigh (U-PAL) Professor of Practice review committee
- 2018 Member, Comparative & International Education Professor of Practice review committee
- 2017-2018 Member, College of Education Dean search committee
- 2016-2017 Chair, *ad hoc* committee on ESL certification
- 2017 Member, Teaching Learning and Technology Professor of Practice search committee
- 2016 Member, Teaching Learning and Technology Professor of Practice review committee
- 2015 Member, Teaching Learning and Technology search committee
- 2013-2015 Chair, *College of Education International Programs Committee*
- 2013- Member, College of Education committee to review promotion & tenure criteria
- 2012-2013 Member, College of Education Distinguished Lecture Series Planning Committee
- 2012-2015 Co-chair, *College of Education Diversity Committee*

- 2011-2012 Representative from the College of Education to the College of Business and Economics
- 2010-2012 Member, *College of Education Integrated Professional Development School Policy Committee*
- 2010-2013 Member, College of Education Statistics and Research Design search committee
- 2009-present Member, *College of Education International Programs Policy Committee*
- 2008-2013 Member, *College of Education Faculty Mentoring Committee*
- 2010-2012 Interim content reviewer for Teaching, Learning, and Technology program's Secondary Social Studies certification
- 2009-2012 Member, Teaching, Learning, and Technology faculty search committee
- 2011 Member, Teaching, Learning, and Technology Professor of Practice search committee
- 2008-2009 Member, Dean's ad hoc committee on evaluating faculty review process

Professional Service

- 2017 Co-chair, *Teaching and Learning With Technology Summit* (in collaboration with Intermediate Units 20 and 21)
- 2016- *Ad hoc* reviewer, *Journal of Computing in Higher Education*
- 2016- *Ad hoc* reviewer, *Australian Journal of Educational Technology*
- 2016- *Ad hoc* reviewer, *Geographical Bulletin*
- 2015- Consulting editor, *Educational Technology Research & Development*
- 2015- *Ad hoc* reviewer, *Journal of Teacher Education*
- 2014- Co-Chair, Geospatial Education SIG, Society for Technology and Teacher Education (SITE)
- 2014- *Ad hoc* reviewer, *Journal of Educational Computing Research*
- 2014- *Ad hoc* reviewer, *Theory and Research in Social Education*
- 2013-present *Ad hoc* reviewer, *Computers and Education*
- 2012-2013 Internet Information Officer, Social Studies Research (SSR) SIG of the American Educational Research Association
- 2012-present *Ad hoc* reviewer, *Educational Policy*
- 2010- Editorial board member for *Journal of Research on Technology in Education*
- 2009-2014 Section Editor, *Contemporary Issues in Technology and Teacher Education*, General section.
- 2009-2013 Internet Information Officer, Technology as an Agent of Change in Teaching and Learning (TACTL) SIG of the American Educational Research Association
- 2009-present *Ad hoc* reviewer, American Education Research Association annual meeting
- 2009-present *Ad hoc* reviewer, *Social Studies Research and Practice*
- 2008-present *Ad hoc* reviewer, College and University Faculty Association of the National Council for the Social Studies (CUFA/NCSS) conference
- 2008-present *Ad hoc* reviewer, *Social Education*
- 2007-present *Ad hoc* reviewer, *Contemporary Issues in Technology and Teacher Education*.

Professional Memberships

American Educational Research Association (AERA).

College and University Faculty Assembly of the National Council for the Social Studies (CUFA/NCSS).

International Society for Technology in Education (ISTE).

Society for Instructional Technology in Teacher Education (SITE).