Quinn Burke

College of Charleston
Department of Education
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Charleston, SC 29401
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EDUCATION

University of Pennsylvania, Graduate School of Education, Philadelphia, PA
> Ed.D, Educational Foundations & Practices Division; May 2012

Columbia University, Graduate School of Arts & Sciences, New York, NY
> Masters of Arts Degree, English Literature; May 2003

Boston College, College of Arts & Sciences, Chestnut Hill, MA
> Arts & Sciences Honors Program; Cross & Crown Society
> Bachelor of Arts Degree, English; May 1999

UNIVERSITY TEACHING EXPERIENCE

College of Charleston – Assistant Professor   2012 – Present
School of Education, Health, & Human Performance
Secondary Division – Learning Technologies
86 Wentworth Street #318, Charleston, SC 29401

EDFS -326/ 687 Incorporating Digital Technology in K-12 Classrooms
> Instruct both undergraduate and Masters level courses with a focus on multimedia, software and hardware applications, as well as introductory computer science and coding.

EDEE-459/ EDFS 460 of Middle & Secondary Grades Clinical Practice
> Supervise student-teachers' instruction and assist with the development of their daily lesson plans and long-range curricula plans

FYSE 138 The Nature of Solitude: Sacred & Secular, Voluntary and Involuntary
> Freshman seminar course focusing on solitude as both a practice and state of being; readings explore the relationship between solitude and creativity, spirituality, technology, and loneliness

MTLA-678 Instruction & Assessment of Older Literacies Learners
> Instruct Masters level coursework in the ever-expanding conception of what it is to be literate in 21st century schools and workplaces and how educators can effectively assess such communication

MTLA-702 Research & Development Capstone
> Oversee Masters level teachers' research projects, including data collection and analysis

Doctoral Student Supervision: Advisor for George Austin, University of South Carolina, Columbia
> Thesis "Debugging as Editing: Computer Science in the Writing Curriculum"

University of Pennsylvania – Instructor   Spring 2010 &11
School of Engineering and Applied Sciences (SEAS)
220 South 33rd Street, Philadelphia, PA 19104

EAS-285 Teaching Computer Science Basics
> Co-teacher of a cross-disciplinary course (Engineering & Education) focusing on the integration of digital media into K-12 pedagogy & curriculum; coordinated undergraduate volunteer teaching at 3 West Philadelphia K-12 schools based on National Science Foundation grants (Broadening Participation in Computing grant #0940511).

K-12 EDUCATION & ADMINISTRATION

Digital Network Group – Chief Technical Writer/ Curriculum Consultant　2008 – 10
1100 Mercantile Lane, Largo, MD, 20774
   Educational services company using immersive digital technology to provide Title I students (grades K-12) with academic, social, and professional support in an after school setting.

Maritime Academy Charter High School - English Department Chair & Teacher　2005 – 08
Arsenal Business Center, 5301 Tacony Street, Philadelphia, PA, 19137
   Urban charter high school located in Northeast Philadelphia

Porter Gaud School – English Teacher　2003-05
300 Albemarle Road, Charleston, SC, 29407
   Independent, NAIS accredited, K – 12 private school located in downtown Charleston

The Princeton Review – SAT/ GRE Instructor　2000-02
2315 Broadway, New York, NY 10024

BOOKS

Burke, Q. (in progress). *Mind the metaphor: The challenge of integrating coding in K-12 curricula* . Cambridge, MA: MIT Press

Kafai, Y.B & **Burke, Q.** (2016). *Connected gaming: What making video games can teach us about learning and literacy*. Cambridge, MA: MIT Press.

Kafai, Y.B. & **Burke, Q.** (2014). *Connected code: Why children need to learn programming*. Cambridge, MA: MIT Press.

JOURNALS & BOOK CHAPTERS

Burke, Q. (forthcoming) DIY zones for Scratch design in classroom and club. In S. Humble (Ed.) *The Coding Generation*. New York: Routledge.

Braught, G. & MacCormick, J.; Bowring, J. & **Burke, Q**.; Cutler, B., Goldschmidt, D., Krishnamoorthy, M., & Turner, W.L.; Huss-Lederman, S., & MacKellar, B.; Tucker, A. (forthcoming). A multi-institutional perspective on H/FOSS projects in the computing curriculum. *ACM Transactions in Computing Education*. New York, NY.

Burke, Q. (2016). Mind the metaphor: Charting the rhetoric about introductory programming in K-12 schools. *On the Horizon*. 24(3).

Kafai, Y.B. & **Burke, Q.** (2016). Constructionist gaming: Understanding the benefits of making games for learning. *Educational Psychologist, 50*(4), 313-34.

Bowring, J. & **Burke, Q.** (2016). Shaping software engineering curricula using open source communities. *Journal of Interactive Learning Research, 27*(1), 5-26.

Burke, Q., O'Byrne, W., & Kafai, Y.B. (2016). Computational participation: Understanding coding as an extension of literacy instruction. *The Journal of Adolescent & Adult Literacy, 59*(4),371-75.

Burke, Q. & Kafai, Y.B. (2014). A decade of game making for learning: From tools to communities. In H. Agius & M.C. Angelides (Eds.) *The Handbook of Digital Games: Institute of Electrical and Electronics Engineers* (pp. 689-709). New York: Wiley-IEEE Press.

Mote, C., Kafai, Y.B., & **Burke, Q.** (2013). Epic Win: Utilizing virtual events to promote communication and learning in schools. *Learning & Leading with Technology (ISTE)*, *December/ January*, 16-21.

Burke, Q. (2012) From literacy to literacies: One teacher's journey. *Journal of Classroom Research in Literacy, 5*(1) 41-66.

Burke, Q. (2012) The markings of a new pencil: Introducing programming-as-writing in the middle school classroom. *Journal of Media Literacy Education, 4*(2), 121-135.

Kafai, Y.B., Roque, R., Fields, D.A., **Burke, Q.**, & Monroy-Hernandez, A. (2012). Collaborative agency in youth online and offline creative production in Scratch. *Research and Practice in Technology Enhanced Learning*, *7*(2), 63-87.

Burke, Q. (2011). DIY learning: New leadership & new technologies in K-12 schools. In (V.C.X. Wang, Ed.) *Encyclopedia of E-Leadership, Counseling, & Training*. Hershey, PA: IGI Global.

Kafai, Y. B., Fields, D. A., & **Burke, W. Q.** (2010). Entering the clubhouse: Case studies of young programmers joining the online Scratch communities. *Journal of Organizational and End-User Computing*, *22*(2), 21-35.

GRANTS

National Science Foundation Core Research & Development   5/16- 5/18 **($179,467)**

    PI - *Boot Camp or University Classroom? Investigating the Effectiveness of Boot Camps in Developing a Diverse Software Development Workforce* (Proposal # 1561705)

A collaborative proposal between the College of Charleston's Department of Education and the Education Testing Researchers (ETR), *Bootcamp or University Classroom?* examines the alternative training settings of coding boot camps both in Santa Cruz, CA (Silicon Valley) and Charleston, SC (Silicon Harbor). The research represents an early step investigating the nature of these rapidly growing intensive boot camps and specifically identifies how these camps compare to the traditional four-year degree in computer science.

National Science Foundation IUSE Collaborative Project   9/16- 9/18 **($249,007)**

    Evaluator - Broadening the Path to the STEM Profession through Cybersecurity Learning (Proposal # 1700254)

Serve as external evaluator to an exploratory research grant investigating the potential to introduce undergraduate students to cybersecurity learning through cross-disciplinary, entry level coursework. Curricula is project-based learning and taps into multiple disciplines including political and social sciences as well as digital literacy. Duties as evaluator include the development of surveys, interviews, and focus group protocol related to undergraduates' perceptions of cybersecurity as a relevant 21st century skill and their experience using the introductory curricular materials.

IT-oLogy CoursePower: 7/16- 6/18 **($20,000 over 2016-17 & $10,000 over 2017-18)**

    PI - *Meeting in the Middle: Developing a Computer Science Pathway for Pre-Service M.S. Teachers*

This grant supplies "seed" money by which to develop and begin to evaluate a middle school pre-service teacher preparation program to prepare undergraduates to teach computer science on the middle school level in South Carolina.

Making the Future Mini-Grant   Summer 2016 **($10,000)**

    Co-PI - *The Charleston Makers Summer Program*

Through a partnership with local public schools and the College of Charleston, the Charleston Makers Summer Program offers two week-long, full-day summer camp cohorts for middle school students, specifically targeting underrepresented communities. The Program focuses on students designing, coding, and constructing their own homemade rockets using the introductory programming language Scratch, Arduino Software, Tinkercad, and 3D Printing technologies.

Center for Partnerships to Improve Education (CPIE) Faculty Fellowship   2015-16
($53,150)

PI - *Meeting in the Middle: Developing a Middle School Computer Science (CS) Pathway for Lowcountry Schools*

A year-long service and research project to design, implement, and evaluate a semester-long computer science course at a local STEM-oriented charter school. Through this partnership, the school will work closely with PI and a cohort of 3 College of Charleston middle-grades education majors to develop and assess a sustainable CS program—a first for CCSD schools.

Expanding Computing Education Pathways (ECEP) Mini-Grant   Summer 2015
($18,360)

Co-PI - *CS for SC: Computer Science in South Carolina*

A collaboration between the College of Charleston's Education Department, Columbia College's (SC) Computer Science Department, and the non-profit iT-oLogy, this 6 month study examines the state of K-12 computing education within South Carolina.   Utilizing state enrollment data in computing coursework, federal data from the National Center for Education Statistics (NCES), and survey responses from individual SC schools, the study offers a baseline examination of where computing currently exists within the state.

Center for Partnerships to Improve Education (CPIE) Faculty Mini-Grant   2012-13
($1,500)

Awarded start-up funding for the proposal "Digital Storytelling with Scratch" to help establish preliminary computer science outreach to middle schools within Charleston Country School District. Spring 2013 outreach entailed a ten-week creative computing workshop for a class of 6th and 7th graders at James Island's Apple Charter School.

Google Computer Science for High Schools (CS4HS) Grant   2010 & 11
($18,500)

Contributor and instructor for the 3-day workshop held at the University of Pennsylvania's School of Engineering; specifically geared toward computer science teachers at struggling Philadelphia public schools, the CS4HS grant focuses on providing these teachers additional training to incorporate the latest technologies within their schools. 3-day workshop included presentations by Penn Engineering faculty and a day-long trip to Google's NYC headquarters.

Schools in the 21st Century Grant   2008-10
($12,000)

Co-writer of the successful grant proposal for the creation of the *Prep Zone*, an after-school tutoring and technology program for students (grades 4-12) at the Philadelphia public school Maritime Charter Academy.

CONFERENCE PROCEEDINGS – peer-reviewed & published

Burke, Q. (2016, July). *Minding the metaphor*. In the *Proceedings of the International Conference on the Future of Education*, June 30th – July 1st, Florence, Italy.

Burke, Q. & Mote, C. (2014, June). Feeding competitive streaks and fostering collaborative determination: Grounding STEM coursework in a national video game challenge. In *Proceedings of the 11th International Conference of the Learning Sciences*. New York, NY: ACM Digital Library.

Kafai, Y.B. & **Burke, Q.** (2014, June). Connected gaming: Moving from Instructionist to Constructionist approaches in K-12 serious gaming. In *Proceedings of the 11th International Conference of the Learning Sciences*. New York, NY: ACM Digital Library.

Kafai, Y.B. & **Burke, Q.** (2013, March). The social turn in K-12 programming: Moving from computational thinking to computational collaboration. In *Proceedings of the 44th SIGCSE Technical Symposium on Computer Science Education*. New York, NY: ACM Digital Library.

Kafai, Y.B., Griffin, J., **Burke, Q.**, Slattery, M., Fields, D.F., Powell, R.M., Grab, M., Davidson, S.B. & Sun, J.S. (2013, March). Broadening participation in and perceptions of computing through a pedagogy of cascading mentoring: Implementing a CS community service learning course. In *Proceedings of the 44th SIGCSE Technical Symposium on Computer Science Education*. New York, NY: ACM Digital Library.

Kafai, Y.B., **Burke, Q.** & Mote, C. (2012, June). *What make competitions fun to participate? The role of audience for middle school game designers*. Proceedings of the 11th Annual International Interaction Design and Children (IDC), June 12-15, Bremen, Germany (pp. 284-287). New York, NY: ACM Digital Library.

Burke, Q. & Kafai, Y.B. (2012, June). *The writers' workshop for youth programmers: Digital storytelling with Scratch in middle school classrooms*. In *Proceedings of the 43rd SIGCSE Technical Symposium on Computer Science Education (pp. 433-38)*. New York, NY: ACM Digital Library.

Burke, Q. & Kafai, Y.B. (2010, June). *Programming & storytelling: Opportunities for learning about code & composition*. Paper presentation at the 9th Annual International Interaction Design and Children (IDC) Conference, June 9-12, Universitat Pompeu Fabra, Barcelona, Spain.

Kafai, Y.B., Peppler, K.A., **Burke, Q.**, Moore, M., Glosson, D. (2010, June). Fröbel's forgotten gift: Textile construction kits as pathways into play, design and computation. Paper presentation at the 9th Annual International Interaction Design and Children (IDC) Conference, June 9-12, Universitat Pompeu Fabra, Barcelona, Spain.

Kafai, Y. B., **Burke, W. Q.,** & Fields, D. A. (2009, September). What videogame making can teach us about access and ethics in participatory culture. In *Breaking new ground*: *Proceedings of the Digital Games Research Association (DIGRA)*, London, United Kingdom: Brunel University.

BOOK REVIEWS
Burke, Q. (2015, April). A book review of *Minds Online: Teaching effectively with technology*. *Teachers College Record*, New York, NY. http://www.tcrecord.org ID Number: 17943

CONFERENCE PRESENTATIONS & WORKSHOPS

Burke, Q. (2017, April). Mind the metaphor. Paper presentation at the 2017 meeting of the American Educational Research Association (AERA), April 27th – May 1st, San Antonio, TX.

Kafai, Y.B. **& Burke, Q.** (2017, April). What can students learn from making games? Findings from a research synthesis. Symposium presentation at the 2017 meeting of the American Educational Research Association (AERA), April 27th – May 1st, San Antonio, TX.

Lyon, L.A., **Burke, Q.**, Denner, J., & Bowring, J. (2017, April). Visions of computer science education at coding boot camps and university classrooms. Symposium presentation at the 2017 meeting of the American Educational Research Association (AERA), April 27th – May 1st, San Antonio, TX.

Burke, Q., Schep, M., & Dalton. (2017, March). CS for SC: A landscape report of K-12 computer science in South Carolina. Poster presented at the *48th SIGCSE Technical Symposium on Computer Science Education*, March 8th – 11th, Seattle, WA.

Rumsey, C., **Burke, Q.**, & Thurman, C.(2017, March). Cracking the code: Bringing introductory computer science to a Charleston middle school. Poster presented at the *48th SIGCSE Technical Symposium on Computer Science Education*, March 8th – 11th, Seattle, WA.

Lyon, L.A., **Burke, Q.**, Denner, J., & Bowring, J. (2017, March). Should your college computer science program partner with a coding boot camp? Poster presented at the *48th SIGCSE Technical Symposium on Computer Science Education*, March 8th – 11th, Seattle, WA.

Hall, C., **Burke, Q.**, & Calvert, C. (March, 2017). Launching a summer maker's camp through cross-disciplinary efforts at the College of Charleston. TLT.com Teaching Learning & Technology Annual Conference, March 7th, Charleston, SC.

Lyon, L.A., **Burke, Q.**, Denner, J., & Bowring, J. (2017, April). Visions of computer science education at coding boot camps and university classrooms. Symposium presentation at the 2017 meeting of the American Educational Research Association (AERA), April 27th – May 1st, San Antonio, TX.

Burke, Q. & Kafai, Y.B. (2015, April). New perspectives for serious gaming: Games that integrate making and playing for learning. Symposium presentation at the 2015 meeting of the American Educational Research Association (AERA), April 9th - 12th, Chicago, Illinois.

Burke, Q., & Thurman, C. (2016, August). *Mind the metaphor: Charting the metaphors by which to introduce Scratch.* Ignite talk at the 4th Scratch Conference, August 4th – 6th, Massachusetts Institute of Technology, Cambridge, MA.

Thurman, C., **Burke, Q.,** & Rumsey, C. (2016, June). *Cracking the code: Engaging middle school students with computer science.* Presentation and demonstration at the Charleston Educator Symposium, June 6th – 8th, Charleston County School District, Charleston, SC.

Burke, Q., Schep, M., & Dalton, T. (2015, October). Landscape Report: K-12 Computing in South Carolina—Results of a State-wide Survey. Paper presentation at South Carolina Annual Ed-Tech Conference, October 24-26th, Greenville, SC.

Burke, Q. (2015, April). Science learning, complexity, and problem solving in and with technological environments. Discussant for paper presentation at the 2015 meeting of the American Educational Research Association (AERA), April 9th - 12th, Chicago, Illinois.

Burke, Q. & Kafai, Y.B. (2015, April). New perspectives for serious gaming: Games that integrate making and playing for learning. Symposium presentation at the 2015 meeting of the American Educational Research Association (AERA), April 9th - 12th, Chicago, Illinois.

Kafai, Y.B. **& Burke, Q.** (2014, August). Connected code: From computational thinking to computational participation. Paper presentation at the 4th Scratch Conference, August 6-9, Massachusetts Institute of Technology, Cambridge, MA.

Mote, C., **Burke, Q.**, & Kafai, Y.B. (2014, June). STEAM video game production for online competitions and collaborations. BYOD session at the 2014 meeting of the International Society for Technology in Education, June 28th – July 1st, Atlanta, Georgia.

Kafai, Y.B. & **Burke, Q.** (2014, June). Connected gaming: Moving from Instructionist to Constructionist approaches in K-12 serious gaming. Paper presentation at the 2014 meeting of the International Conference of the Learning Science, June 23rd – 27th, Boulder, CO.

Burke, Q. (2014, April). Leveraging literacy: Interactive digital storytelling with Scratch programming. Poster presentation at the 2014 meeting of the American Educational Research Association (AERA), April 3rd -7th, Philadelphia, Pennsylvania.

Burke, Q. (2014, April). From "tech geeks" to "collaborative makers": A new agenda for children's programming. Poster presentation at the 2014 meeting of the American Educational Research Association (AERA), April 3rd -7th, Philadelphia, Pennsylvania.

Burke, Q., Kafai, Y.B., & Mote, C. (2013, April). The "holding power" of making video games: Grounding STEM coursework in a culture of authentic competition and collaboration. Paper presented at the 2013 meeting of the American Educational Research Association (AERA), April 27th - May 1st, San Francisco, California.

Burke, Q. (2013, April). Explorations in game design. Chaired roundtable session at the 2013 meeting of the American Educational Research Association (AERA), April 27th - May 1st, San Francisco, California.

Kafai, Y.B., **Burke, Q.**, Griffin, J., Powell, R. Grab, M., Slattery, M., & Davidson, S., & Mote, C. (2013, April). A cascading model: Undergraduates as mentors and mentees in a computer science service learning course. Division C, Section 1e Panel presentation at the 2013 meeting of the American Educational Research Association (AERA), April 27th - May 1st, San Francisco, California.

Burke, Q. (2013, February). To school or not to school: Middle school students' use of Scratch in both classroom and club. Paper presentation at South Carolina Educators for the Practical Use of Research (SCEPUR) Annual Conference, February 7-8th, Columbia, SC.

Burke, Q. (2012, October). Programming as the new literacy. Paper presentation at South Carolina Annual Ed-Tech Conference, October 24-26th, Greenville, SC.

Burke, Q., Kafai, Y.B., & Mote, C. (2012, July). *For the win: Middle-schoolers' use of Scratch in the National STEM Video Game Challenge*. Paper presentation at the 3rd Scratch Conference, July 25-28th, Massachusetts Institute of Technology, Cambridge, MA.

Kafai, Y.B., Fields, D.A., **Burke, Q.**, Roque, R., & Blanton, A. (2012, July). *Making together: Supporting Creative Collaboration in Scratch*. Paper presentation at the 3rd Scratch Conference, July 25-28th, Massachusetts Institute of Technology, Cambridge, MA.

Burke, Q. & Kafai, Y.B. (2012, April). *Programming as process: The potential of the writing workshop to integrate computer science into middle-school classrooms*. Paper presented at the 2012 meeting of the American Educational Research Association (AERA), April 13-17th, Vancouver, Canada.

Griffin, J., Kaplan, E., & **Burke, Q.** (2012, March). *Debugems and other deconstruction kits for STEM learning*. Paper presented at the Institute of Electrical and Electronics Engineers (IEEE) Integrated STEM Education Conference, March 9th, Ewing, NJ.

Burke, Q. & Kafai, Y.B. (2012, March). *The writers' workshop for youth programmers: Digital storytelling with Scratch in middle school classrooms*. Paper presented at the *43rd SIGCSE Technical Symposium on Computer Science Education*, February 29th - March 3rd, Raleigh, NC.

Burke, Q., Kafai, Y.B., Griffin, J., Powell, R.M., Grab, M., Davidson, S.B., Sun, J.S. (2012, March). The reflective mentor: Charting undergraduates' responses to computer science service learning. Poster presented to the *43rd SIGCSE Technical Symposium on Computer Science Education*, February 29th - March 3rd, Raleigh, NC.

Burke, Q. (2012, February). The programming-as-writing workshop: Integrating computer science into the middle school classroom. Paper accepted to the 33rd Annual *Ethnography in Education Research Forum*, February 24-25th, Philadelphia, PA.

Burke, Q., Monroy-Hernandez, A., & Kafai, Y.B. (2011, April). *Tagging in a community of media creators*: *Practices that make programs popular in Scratch Online*. Paper presentation at the 2011 meeting of the American Educational Research Association (AERA), April 8 – 12th, New Orleans, LA.

Griffin, J., Kaplan, E., **Burke, Q.**, & Kafai, Y.B. (2011, March). Deconstruction kits in Scratch: Designing Scratch Debugems for learning core programming concepts. Poster presentation at the *42nd SIGCSE Technical Symposium on Computer Science Education*, March 9-12th, Dallas, TX.

Griffin, J., Kaplan, E., Kafai, Y.B., & **Burke, Q.** (2011, March). A deconstruction kit for the LilyPad Arduino: Designing debugging sets for learning about circuitry & programming among high school students. Poster presentation at the *42nd SIGCSE Technical Symposium on Computer Science Education*, March 9-12th, Dallas, TX.

Burke, Q. & Kafai, Y.B. (2010, November). *DIY programming: Critical creation and sometime collaboration using Scratch*. Paper presentation at the DIY Citizenship Conference, November 11-14th, University of Toronto, Canada.

Burke, Q. (2010, August). *Exploring the relationship between programming & writing: 2 case studies*. Paper presentation at the 2nd Scratch Conference, August 12-14th, Massachusetts Institute of Technology, Cambridge, MA.

Burke, Q. (2010, May). *Programming as writing*. Paper presentation at Teachers College Educational Technology Conference, May 15-16th, Columbia University Teachers College, NY.

Burke, Q. & Kafai, Y.B. (2010, April). Programming as writing: Opportunities for learning about code and composition. Paper presentation at the annual meeting of the American Educational Research Association (AERA), April 30 – May 4th, Denver, CO.

Griffin, J., Monagan, W., **Burke, Q.,** & Dougherty, J.D. (2010, February). *Computer science as the new 21st Century literacy*. [White paper]. Paper presented in Harrisburg at the Pennsylvania Department of Education's meeting on state-wide curriculum and teacher certification for K-12 computer science education.

Burke, Q. & Lynch, D. (2009, December). *Faith-based schooling: Changing needs & new challenges*. [White paper]. Paper presented at Penn Graduate School of Education's Faith-Based Learning Conference, December 12th, Philadelphia, PA.

Burke, Q. (2009, March). The use of home-school contracts at Pennsylvania charter schools. Round-table paper presentation at the 14th Annual Harvard Graduate School of Education Student Research Conference, March 13th, Cambridge, MA.

NATIONAL ADVISORY APPOINTMENTS

- Advisory Board, Computer Science for All CS-NYC, The Research Alliance for New York City Schools, New York University Steinhardt School of Education   since 2016
    - Work with the NYU Evaluation Team to oversee the implementation of the 10-year, $81 million computer science initiative for all New York City K-12 public schools

- Advisory Board, Computer Science Task Force, South Carolina Education Oversight Committee   since 2016

- Advisory board, South Carolina Mini-Grants Division for "Expanding Computing Education Pathways (ECEP)", National Science Foundation (CNS# 1228355 & 228352)   since 2015

- Advisory Board, Charleston SC Chamber of Commerce Computer Science Outreach   since 2015

- Advisory Board, Lowcountry Technical Academy, Charleston County Public School, SC   since 2015

- Advisory board, "TECHFIT: Combining Fitness and Technology to Spark Interest in STEM National Science Foundation-ITEST Project (DRL #072051394)   2015-17

INVITED TALKS & WORKSHOPS

- "Implementing Introductory Coding for Gifted & Talented Students" *South Carolina Gifted & Talented Region 5: Gifted by Design—Exploring All Angles*, June 7th, 2017.

- "Computer Science in South Carolina High Schools: What Next?" *South Carolina Business Education Association (SCBEA) Annual Meeting*, February 1st - 3rd, 2017.

- "Launching a Summer Maker's Camp through Cross-Disciplinary Efforts at the College of Charleston". 2nd Annual TLT Con: Teaching, Learning, & Technology Conference, March 7-9th, 2017.

- "The First Year Experience: Learning to Talk around the Table". Invited Faculty Presentation at the College of Charleston's Accepted Student Weeks, March 19th, 2016.

- "Building Your Own Bricks—Using the SNAP Programming Language". Presenter at the Lowcountry Student Career Conference: *Up-Grading Career Domains: Aligning Student Interests with Workforce Need Workforce Needs,* May 18th, 2015.

- "Computing in the Arts (CITA) Workshop: Model Curricula". Participant in the National Science Foundation funded (#1044861) workshop on leveraging computer science applications for visual and musical expression. College of Charleston Computer Science Department, May 14[th-] 15th 2015.

- "Computer Science Education—Preparing K-12 Teachers". Panelist at the IT-oLogy South Carolina Summit on IT, March 18th, 2015.

- "CS for SC: Where is the State Currently At & Where Can It Go?" *South Carolina Business Education Association (SCBEA) Annual Meeting*, January 28th – February 1st, 2015.

- "Coding Social: Moving from Computational Thinking to Computational Participation". *Science and Creativity Annual Conference*, Seoul, South Korea - Keynote Speaker on Computational Thinking, December 6th, 2013.

- "The Comeback of Programming: Programming as Communication (& not just Computation) in the 21st Century". *College of Charleston Honors College Lecture Series*, November 15th, 2013.

- "Making Things: Education for the 21st Century". *Palms of Promise Teacher Cadet Day*, College of Charleston School of Education, Health, & Human Performance, October 4th, 2012.

- "Overcoming the Gender Divide in Computer Science as a Study & Career". *Tech-Girlz Workshop for Middle School Girls*, Penn Graduate School of Education, October 15th, 2011.

- "Teaching Screen-agers: How Should Technology Change what Schools Do?" *Penn Mid-Career Doctoral Program 10th Anniversary*, Wharton School of Business, July 9th, 2011.

- "The Future of Social Media & What Parents Need to Know". *Project Speak-Up*, Gwynnedd-Mercy Academy, March 3rd, 2011.

REVIEWER

- Reviewer for MIT Press (2017)

- Reviewer for the National Science Foundation Grant Panel, Computer & Information Science & Engineering Directorate (Arlington, VA - June 2017, May 2015, April 2014, May 2013, June 2012)

- Reviewer for *Journal of Research in STEM Education* (2017)

- Reviewer for *Institute of Electrical and Electronics Engineers (IEEE) Transactions on Education* (2016 & 2017)

- Reviewer for Special Interest Group Computer Science Education (SIGCSE) 2017 Conference, (Seattle, WA, March 2017)

- Reviewer for the *TechTrends: Linking Research & Practice to Improve Learning.* (2016), Association for Educational Communications & Technology, Springer, US

- Reviewer and Committee Member for Computer Science Teachers Association (CSTA) Annual Meeting (San Diego, CA, July 2016)

- Reviewer for the International Conference of the Learning Sciences (Singapore 2016; Boulder, CO 2014; Sydney, Australia 2012)

- Reviewer for the American Educational Research Association (AERA) Annual Conference (Washington, DC 2016; Chicago, IL 2015; Philadelphia, PA 2014; San Francisco, CA 2013)

- Reviewer for *Studies for Education Evaluation* (2015) Elsevier Publishing, Netherlands

- Reviewer for the ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp) Conference (Osaka, Japan, September 2015)

- Reviewer for the *Journal of Classroom Research in Literacy* (2011-14), University of Toronto, ON

- Reviewer for Institute of Electrical and Electronics Engineers' (IEEE) *Computer* magazine, Special Issue on Computer Science Education (July 2013)

- Examiner for the 2011-12 Philadelphia School District Charter School Assessment Team, responsible for reviewing incoming charter school applications and renewals

- Reader and Examiner for the College Board's AP Examination in English Literature (Louisville, KY, June 2011 & 2010)
- Reviewer for *Educational Research* (2010-11), National Foundation for Educational Research, UK.
- Reviewer for 30th Annual Ethnography in Education Research Forum (2009), University of Pennsylvania, PA

HONORS & FELLOWSHIPS

AERA Outstanding Book Award Nomination   2015
   Nominated with Yasmin Kafai for MIT Press book *Connected Code: Why Children Need to Learn Programming*.

Summer Fellowship, Association for Core Texts and Courses (ACTC)   2014
   Co-represented the College of Charleston as a partner institution for a two-week long international seminar on the role of liberal arts education in 21st century learning; the seminar "Tradition and Innovation: Liberal Arts Education through Core Texts" sponsored by the ACTC as well as Columbia University's Core Curriculum Program and Yale University's Directed Studies Program. NY, NY & New Haven, CT, June 1-15th.

2012 Best Student Paper, American Educational Research Association (AERA)   2012
   Media Culture & Curriculum (Special Interest Group)
   For the AERA paper submission *Consider the Process: The Potential of the Writing Workshop as a Means to Integrate Computer Programming into Middle School Classrooms*

Praxis Series: Recognition of Excellence   2006
   Awarded certificate by ETS for outstanding score (top 15%) on the English Language, Literature, and Composition exam.

MEDIA & EDITORIALS

"Earning a College Degree in Order to Go To Camp?" *Inside Higher Education* (August 29,2017).

South Carolina high schools could require computer coding course for graduation. *The Post and Courier* (March 26, 2017).

South Carolina Department of Education introduces K through 8 computer science standards. *The Post and Courier* (December 25, 2016).

Code school exam. *The Post and Courier* (September 3, 2016).

Coding bootcamps focus of College of Charleston research. *The College Today* (August 8, 2016).

Frontiers of digital learning probed by researchers. *Education Week* (May 7, 2015).

Professor's book explores computer programming as a new literacy. *The College Today* (July 15, 2014).

Programming: A mark of inequality? *Huffington Post* (June 24, 2014).

Computer programming goes back to school. *Phi Delta Kappa International* (September 5, 2013).

PROFESSIONAL MEMBERSHIPS/ SERVICE

Chair, South Carolina Computer Science K-12 Education Steering Committee   since Fall 2016
  Statewide consortium promoting K-12 computer science awareness as well as developing standards, curricula, & teacher preparation programs. Consortium funded through wider National Science Foundation support Expanding Computing Education Pathways Grant (CNS# 1228355 & 228352)
  - **Member**   since 2015

American Educational Research Association (AERA)   since 2009
  Division C: Learning and Instruction
    SIG Learning Sciences, Media, Culture and Curriculum

Association for Computer Machinery (ACM)   since 2010

Computer Science Teachers Associations (CSTA)   since 2010

National Association for Media Literacy Education (NAMLE)   since 2011

Pennsylvania Level I Secondary Teacher Certification   since 2006

Pennsylvania Association of Computer Science Educators (PACSE)   2009-13

National Council for Teachers of English (NCTE)   2003-06

Charleston Chamber of Commerce Computer Science Advisory Board Member   since 2014

Charleston Lowcountry Technical Academy Board Member   since 2014

Moonstone Pre-School Board Member   2011-12

SERVICE/ ACTIVITIES – COLLEGE OF CHARLESTON

Chair, College-wide Faculty Committee on Academic Standards (FCAS)   since 2015
  - **Member**   since 2013

Member, TEDU Curriculum Committee   **since** 2016

Chair, TEDU Research and Professional Development Committee   2014-16
  - **Member**   2013-14

Assessment Committee Member   since 2014

First Year Experience—Invited Faculty Presenter to Accepted Students   spring 2016

Teaching Learning & Technology (TLT)—Pedagogical Cohort on Assessment   fall 2016

Member, Masters in Teaching, Learning, & Advocacy (MTLA) Advisory Boar   since 2014

Graduate Council Representative   2013 - 15

First Year Experience Course Orientation   summer 2013

TLT Faculty Technology Institute   summer 2013

First Year Experience Writing Institute   summer 2013