Lauren E. Margulieux

Associate Professor of the Learning Sciences
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Department of Learning Sciences
Georgia State University
Atlanta, GA 30302-3978

EDUCATION

Ph.D. in Engineering Psychology, Minor in Education, 2016
Georgia Institute of Technology
Committee: Richard Catrambone (chair), F. Durso, M. Guzdial, W. Newstetter, & W. Rogers
Dissertation: *Using Subgoal Learning and Self-Explanation to Improve Programming Education*

M.S. in Engineering Psychology, 2014
Georgia Institute of Technology
Committee: Richard Catrambone (chair), F. Durso, and M. Guzdial
Thesis: *Subgoal Labeled Instructional Text and Worked Examples in STEM Education*

B.A. in Psychology, 2010
Southwestern University
Summa Cum Laude

Texas A&M University, August 2007 – May 2008

PROFESSIONAL EXPERIENCE

Associate Professor of the Learning Sciences, Georgia State University	2022-present
Founding Director, Snap Inc. Center for Computer and Teacher Education, Georgia State University	2021-present
Assistant Professor of Learning Technologies, Georgia State University	2016-2022
Postdoctoral Scholar, Center for Teaching and Learning, Georgia Tech	2016
Graduate Teaching Assistant (Instructor of Record), Georgia Tech	2015-16
Graduate Research Assistant, Center for 21st Century Universities, Georgia Tech	2011-15
Human Factors Intern, Human Interfaces Inc.	2010-11
Peer Academic Mentor, Southwestern University	2009-10

Awards and Honors

Best Reviewed Paper Award at International Computing Education Research Conference, 2020
What Do We Think We Think We are Doing?: Metacognition and Self-Regulation in Programming

John Henry "Fool's" Award at International Computing Education Research Conference, 2019
Spatial Encoding Strategy Theory: The Relationship between Spatial Skill and STEM Achievement

Recipient of Georgia State University's College of Ed. and Human Development's Recognizing Scholarly Excellence program: semester-long sabbatical during 4th year, 2019

Recipient of SIGCSE Technical Symposium Travel Grant: $850, 2019

Winner of the Emerald/HETL Education Outstanding Doctoral Research Award: $1500, 2017

Selected for Early Career Workshop at CSCL 2017, International Society for the Learning Sciences: $1000, 2017

Young Scientist Travel Award, Indiana University CogSci Program and NSF: $1000, 2016

Outstanding Graduate Student, School of Psychology, Georgia Tech: $500, 2016

Chair's Award for Best Paper at International Computing Education Research Conference, 2015
Subgoals, Context, and Worked Examples in Learning Computing Problem Solving

Outstanding Graduate Student Instructor Finalist, Georgia Tech, 2015
Course: Research Methods for Human Subjects Research

Presidential Scholarship, Georgia Tech: $2750 per semester, 2011-2015

Outstanding Psychology Student, Southwestern University, Spring 2010

Psi Chi Regional Research Award: $300, Spring 2010
Shy to "Fly": Testing the Effectiveness of Self-presentation Strategies of Shy Individuals

SCHOLARSHIP AND PROFESSIONAL DEVELOPMENT

Funding

Corporate Gifts and Funding

Snap Inc. Center for Computer and Teacher Education
- Purpose: Endowment established by Snap Inc. and Georgia State University Research Foundation
- Position: Founding Director
- Other personnel: Calandra, B. D. (Senior Associate Director) & Shapiro, B. R. (Associate Director)
- Endowment: $6,700,000
- Annual budget: $268,000

Google Community Partnership Grant
- Purpose: To accelerate the Computing Integration Faculty Fellowship program, which works with faculty in Georgia State University's College of Education and Human Development to integrate computing into preservice teacher preparation.
- Position: Principal Investigator
- Project Dates: August 2022 – July 2025
- Budget: $161,568

Google Tech Education Research Grant
- Title: *How Does Integrated Computing Support Computing Education in Georgia Schools*
- Position: Principal Investigator
- Other personnel: Bryan Cox & Lavita Williams (Georgia Dept. of Education)
- Project Dates: January – December 2023
- Budget: $87,100 (including $14,400 cost sharing from Georgia Dept. of Education)

External Grant Awards

NSF:EHR - Improving Undergraduate STEM Education (IUSE) Level 2
- Title: *Expanding Subgoal Labels for Imperative Programming to Further Improve Student Learning Outcomes* (#2111578)
- Position: Senior Personnel
- Other personnel: Morrison, B. B. (PI, University of Nebraska Omaha), Decker, A. (Co-PI, University at Buffalo), Bart, A. C. (Senior Personnel, University of Delaware)
- Project dates: August 2021 – July 2024
- Budget: $599,941

NSF:EHR - Faculty Early Career Development Program (CAREER)
- Title: *Spreading Computational Literacy Equitably via Integration of Computing in Preservice Teacher Prep* (#1941642)
- Position: Principal Investigator
- Project dates: July 2020 – June 2025
- Budget: $489,631

NSF:CISE - Early-concept Grants for Exploratory Research (EAGER)
- Title: *Microcredentials for Integrating Computing Responsibly into Other Domains (MICRO; #*2016010*)*
- Position: Co-Principal Investigator
- Other personnel: Calandra, B. (PI, Georgia State), Cox, Bryan (Co-PI, Georgia Dept. of Ed), Abell, O. & Sykora, C. (Consultants, Intl Society for Technology in Education)
- Project dates: June 2020 – May 2022
- Budget: $299,182

US Department of Education - Teacher Quality Partnership
- Title: *NURTURE: Network for Urban and Rural Teachers United for Residency Engagement* (U336S190026)
- Position: Senior Personnel
- Other personnel: Benson, G. (PI), Ogletree, S., Patterson, D., and Feinberg, J. (Co-PIs)
- Project dates: October 2019 – September 2024

- Budget: $7,038,676

NSF:EHR - Improving Undergraduate STEM Education (IUSE) Level 1
- Title: *Developing and Assessing Subgoal Labels for Imperative Programming to Improve Student Learning Outcomes* (#1712231)
- Position: Co-Principal Investigator
- Other personnel: Morrison, B. B. (PI, University of Nebraska Omaha), Decker, A. (Co-PI, University at Buffalo)
- Project dates: August 2017 – July 2021
- Budget: $299,927

NSF:CISE - Technical Assistance Workshop for CSforAll:RPP Submission
- Title: *Technical Assistance Workshop on Researcher Practitioner Partnerships for CSforAll:RPP in Atlanta, Georgia* (#1945313)
- Position: Principal Investigator
- Other personnel: Calandra, B. (Co-PI)
- Project dates: October 2019 – June 2021
- Budget: $94,951

APF COGDOP Graduate Research Scholarship
- Title: *Subgoal-Oriented Instructional Text and Worked Examples in STEM Education*
- Position: Principal Investigator
- Project dates: January 2013 – January 2014
- Budget: $1000

Internal Grant Awards

Georgia State University, College of Ed. and Human Dev., Technology-Infusion Grants
- *Discipline-Inclusive Introduction to Computational Thinking Concepts and Activities,* collaborator: Caroline Sullivan, budget: $500, Spring 2019
- *Algebra with Bootstrap for the Secondary Mathematics Methods Course*, collaborator: Pier Junor Clarke, budget: $500, Spring 2019
- *Utilizing Pencil Code to Teach Computational Thinking for the Middle Childhood Science Methods Course,* collaborators: Natalie King and Patrick Enderle, budget: $500, Spring 2019

Publications

Refereed Journal Articles

Numbering system: J# = Journal article

Italics indicate student author

[J20] **Margulieux, L. E.,** Enderle, P., Junor Clarke, P. A., King, N., Sullivan, C., Zoss, M., & Many, J. (2022). Integrating Computing into Preservice Teacher Preparation Programs across the Core: Language, Mathematics, and Science. *Journal of Computer Science Integration, 5*(1), 1–16. doi: 10.26716/jcsi.2022.11.15.35

[J19] *Cox, B.*, **Margulieux, L. E.**, & Darling-Aduana, J. (2022, online). Georgia online education option for broadening participation in K-12 computer science. *Policy Futures*

in Education. Special Issue: Broadening Participation for All Students: Praxis and Policy towards Equity in 21st Computer Science Education. doi: 10.1177/14782103221082752

[J18] Loksa, D., **Margulieux, L. E.,** Becker, B., Craig, M., Denny, P., & Prather, J. (2022). Metacognition and self-regulation in programming education: Theories and exemplars of use. *ACM Transactions on Computing Education, 22*(4), 1-31. https://doi.org/10.1145/3487050

[J17] **Margulieux, L. E.**, & Catrambone, R. (2021). Scaffolding problem solving with learners' own self explanations of subgoals. *Journal of Computing in Higher Education, 33*, 499-523. doi: 10.1007/s12528-021-09275-1

[J16] Enderle, P. J., **Margulieux, L. E.**, & King, N. S. (2021). What's in a wave? Using modeling and computational thinking to enhance students' understanding of waves. *The Science Teacher, 88*(March/April)*,* 54-58*.*

[J15] **Margulieux. L. E.**, & Yadav, A. (2021). Middle science computing integration with preservice teachers. *Journal of Computers in Mathematics and Science Teaching, 40*(1), 29-49.

[J14] Williams, K. Z., **Margulieux, L. E.**, & Lawrence, G. D. (2020). Teaching certificate redesign: Making a flexible preparing future faculty program. *To Improve the Academy, 39*(2). https://doi.org/10.3998/tia.17063888.0039.209

[J13] **Margulieux, L. E.,** Morrison, B. B., Franke, B., & *Ramilison, H.* (2020). Effect of Implementing Subgoals in Code.org's Intro to Programming unit in Computer Science Principles. *ACM Transactions on Computing Education, 20*(4), 1-24. https://doi.org/10.1145/3415594

[J12] **Margulieux, L. E.**, Morrison, B. B., & Decker, A. (2020). Reducing dropout and failure rates in introductory programming with subgoal labeled worked examples. *International Journal of STEM Education, 7*(19)*.* 1-16. doi: 0.1186/s40594-020-00222-7

[J11] Morrison, B. B., **Margulieux, L. E.**, & Decker, A. (2020). The curious case of loops. *Computer Science Education, 30*(2), 127-154*.* doi: 10.1080/08993408.2019.1707544

[J10] Kim, M. K., & **Margulieux, L. E.** (2020). An exploratory study of learner changes during a short-term exposure to hybrid learning. *International Journal of Learning Technology, 15*(1), 66-81.

*[J9] **Margulieux, L. E.** (2020). Spatial Encoding Strategy theory: The relationship between spatial skill and STEM achievement. *ACM Inroads, 11*(1), 65-75. doi: 10.1145/3381891

*Reprint of paper awarded John Henry "Fool's" Award at ICER 2019

[J8] *Ketenci, T. A.*, Calandra, B., **Margulieux, L. E.**, & Cohen, J. (2019). The relationship between learner characteristics and student outcomes in a middle school computing course: An exploratory analysis using structural equation modeling. *Journal of Research on Technology in Education, 51*(1), 63-76*.* doi: 10.1080/15391523.2018.1553024

[J7] **Margulieux, L. E.**, *Ketenci, T. A.*, Decker, A. (2019). Review of measurements used in computing education research and suggestions for increasing standardization. *Computer Science Education, 29*(1), 49-78*.* doi: 10.1080/08993408.2018.1562145

[J6] **Margulieux, L. E.**, & Catrambone, R. (2019). Finding the best types of guidance for constructing self-explanations of subgoals in programming. *Journal of the Learning Sciences, 28*(1), 108-151. doi: 10.1080/10508406.2018.1491852

[J5] **Margulieux, L. E.**, Catrambone, R., & *Schaeffer, L. M.* (2018). Varying effects of subgoal labeled expository text in programming, chemistry, and statistics. *Instructional Science*, *46*(5), 707-722. doi: 10.1007/s11251-018-9451-7

[J4] **Margulieux, L. E.,** McCracken, W. M., & Catrambone, R. (2016). A taxonomy to define courses that mix face-to-face and online learning. *Educational Research Review, 19*, 104-118. doi: 10.1016/j.edurev.2016.07.001

[J3] **Margulieux, L. E.,** Chen, D., McDonald, J. D., Bujak, K. R., Gable, T. M., Darling, C. M., Schaeffer, L. M., & Barg-Walkow, L. H. (2016). Online collaboration applications evaluated by ease of use. *Ergonomics in Design*, *24*(2), 21-30. doi: 10.1177/1064804615611273

[J2] **Margulieux, L. E.,** & Catrambone, R. (2016). Improving problem solving with subgoal labels in expository text and worked examples. *Learning and Instruction, 42*, 58-71. doi: 10.1016/j.learninstruc.2015.12.002

[J1] **Margulieux, L. E.,** Catrambone, R., & Guzdial, M. (2016). Employing subgoals in computer programming education. *Computer Science Education*, *26*(1), 44-67. doi: 10.1080/08993408.2016.1144429

<u>Highly-Competitive Conference Proceedings</u>

P# = Conference proceeding published by ACM and equivalent to a journal article

[P12] Prather, J., **Margulieux, L. E.**, Whalley, J., Denny, P., Reeves, B. N., Becker, B., Singh, P., *Powell, G.*, & Bosch, N. (2022). Getting by with help from my friends: Group study in introductory programming understood as socially share regulation. In *Proceedings of the Eighteenth Annual Conference on International Conference on International Computing Education Research,* Volume 1 (pp.164-176). New York, NY: ACM. https://doi.org/10.1145/3501385.3543970

[P11] **Margulieux, L. E.,** Denny, P., Cunningham, K., *Deutsch, M.,* & Shapiro, B. (2021). When wrong is right: The instructional power of multiple conceptions. In *Proceedings of the Seventeenth Annual Conference on International Computing Education Research* (pp. 184-197). New York, NY: ACM. doi: 10.1145/3446871.3469750.

*[P10] Prather, J., Becker, B., Craig, M., Denny, P., Loksa, D., & **Margulieux, L. E.** (2020). What do we think we think we are doing?: Metacognition and self-regulation in programming. In *Proceedings of the Sixteenth Annual Conference on International Computing Education Research* (pp. 2-13). New York, NY: ACM. doi: 10.1145/3372782.3406263.

*Best Reviewed Paper Award

*[P9] **Margulieux, L. E.** (2019). Spatial Encoding Strategy theory: The relationship between spatial skill and STEM achievement. In *Proceedings of the Fifteenth Annual Conference on International Computing Education Research* (pp. 81-90). New York, NY: ACM. doi: 10.1145/3291279.3339414

*John Henry "Fool's" Award

[P8] Decker, A., **Margulieux, L. E.**, Morrison, B. B. (2019). Using the SOLO Taxonomy to understand subgoal labels effect on problem solving processes in CS1. In *Proceedings of the Fifteenth Annual Conference on International Computing Education Research* (pp. 209-217). New York, NY: ACM. doi: 10.1145/3291279.3339405

[P7] **Margulieux, L. E.**, Morrison, B. B., & Decker, A. (2019). Design and pilot testing of subgoal labeled worked examples for five core concepts in CS1. In *ITiCSE '19: Innovation and Technology in Computer Science Education Proceedings* (pp. 548-553). New York, NY: ACM. doi: 10.1145/3304221.3319756

[P6] *Parker, M. C., Solomon, A., Pritchett, B., Illingworth, D.*, **Margulieux, L. E.**, & Guzdial, M. (2018). Socioeconomic status and computer science achievement: Spatial ability as a mediating variable in a novel model of understanding. In *Proceeding of the Fourteenth Annual Conference on International Computing Education Research* (pp. 97-105). New York, NY: ACM. doi: 10.1145/3230977.3230987

[P5] **Margulieux, L. E.**, & Catrambone, R. (2017). Using learners' self-explanations to guide initial problem solving. In *Proceeding of the Thirteenth Annual Conference on International Computing Education Research* (pp. 21-29). New York, NY: ACM. doi: 10.1145/3105726.3106168

[P4] Morrison, B. B., Decker, A., & **Margulieux, L. E.** (2016). Learning loops: A replication study illuminates impact of HS courses. In *Proceedings of the Twelfth Annual International Conference on International Computing Education Research* (pp. 221-230). New York, NY: ACM. doi: 10.1145/2960310.2960330

*[P3] *Morrison, B. B.*, **Margulieux, L. E.**, & Guzdial, M. (2015). Subgoals, context, and worked examples in learning computing problem solving. In *Proceedings of the Eleventh Annual International Conference on International Computing Education Research* (pp. 21-29). New York, NY: ACM. doi: 10.1145/2787622.2787733

*Chairs' Best Paper Award

[P2] **Margulieux, L. E.** & Catrambone, R. (2014). Improving problem solving performance in computer-based learning environments through subgoal labels. In *Proceedings of the First ACM Conference on Learning @ Scale* (pp. 149-150). New York, NY: ACM. doi: 10.1145/2556325. 2567853

[P1] **Margulieux, L. E.**, Guzdial, M., & Catrambone, R. (2012). Subgoal-labeled instructional material improves performance and transfer in learning to develop mobile applications. In *Proceedings of the Ninth Annual International Conference on International Computing Education Research* (pp. 71-78). New York, NY: ACM. doi: 10.1145/2361276.2361291

Edited Books and Special Issues

Margulieux, L. E., & Morrison, B. B. (Eds.). (2019). Special Issue: Advancing Theory about the Novice Programmer. *Computer Science Education. 29*(2-3), 103-308.

Madden, A., **Margulieux, L. E.**, Goel, A. K., & Kadel, R. S. (Eds.). (2019). *Blended Learning in Practice: A Guide for Practitioners and Researchers.* Cambridge, MA: MIT Press.

Book Chapters Published in Edited Books

C# = Book chapter

[C7] **Margulieux, L. E.**, Dorn, B., & Searle, K. (2019). Learning Sciences for Computing Education. In S. Fincher & A. Robins (Eds.), *Handbook of Computing Education Research* (pp. 208-230). Cambridge, UK: Cambridge University Press.

[C6] Robins, A., **Margulieux, L. E.**, & Morrison, B. B. (2019). Cognitive Sciences for Computing Education. In S. Fincher & A. Robins (Eds.), *Handbook of Computing Education Research* (pp. 231-275). Cambridge, UK: Cambridge University Press.

[C5] **Margulieux, L. E.** (2019). Blended learning in an upper-level, required course on research methodology. In A. Madden, L. E. Margulieux, R. S. Kadel, & A. K. Goel (Eds.), *Blended Learning in Practice: A Guide for Practitioners and Researchers* (pp. 269-288). Cambridge, MA: MIT Press.

[C4] **Margulieux, L. E.**, & Kadel, R. S. (2019). Analyzing quantitative and qualitative data for blended learning. In A. Madden, L. E. Margulieux, R. S. Kadel, & A. K. Goel (Eds.), *Blended Learning in Practice: A Guide for Practitioners and Researchers* (pp. 193-212). Cambridge, MA: MIT Press.

[C3] Kadel, R. S., & **Margulieux, L. E.** (2019). Research methods in blended learning. In A. Madden, L. E. Margulieux, R. S. Kadel, & A. K. Goel (Eds.), *Blended Learning in Practice: A Guide for Practitioners and Researchers* (pp. 129-154). Cambridge, MA: MIT Press.

[C2] Schaeffer, L. M., **Margulieux, L. E.**, Chen, D., & Catrambone, R. (2016). Feedback via Educational Technology. In L. Lin & R. Atkinson (Eds.), *Educational Technologies: Challenges, Applications, and Learning Outcomes*. (Education in a Competitive and Globalizing World, pp. 59-72). New York, NY: Nova Science Publishers, Inc.

[C1] Durso, F. T., **Margulieux, L. E.**, & Blickensderfer, E. L. (2014). Human Factors. *Oxford Bibliographies Online: Psychology.* doi:10.1093/obo/9780199828340-0159

Manuscripts in Revision

Margulieux, L. E., Morrison, B. B., & *Cetin, G.* (revise and resubmit). Revisiting Self-efficacy in CS Education: A Replication. *ACM TOCE*.

Yadav, A., Connolly, C., Berges, M., Chytas, C., Franklin, C., Hijón-Neira, R., Macann, V., Margulieux, L. E., Ottenbreit-Leftwich, A., & Warner, J. R. (revise and resubmit). A review of international models of computer science teacher education. *ACM TOCE*.

Refereed Conference Proceedings

Cohen, J. D., **Margulieux, L. E.**, Renken, M., & Jones, W. M. (2020). Conclusions from the validation of a vignette-based instrument to measure maker mindsets. In Gresalfi, M. and Horn, I. S. (Eds.) *The Interdisciplinarity of the Learning Sciences, 14th International Conference of the Learning Sciences (ICLS) 2020 Volume 3* (pp. 1649-1652). Nashville, TN: International Society of the Learning Sciences.

Margulieux, L. & Yadav, A. (2020). Middle Science Computing Integration with Preservice Teachers. In D. Schmidt-Crawford (Ed.), *Proceedings of Society for Information*

Technology & Teacher Education International Conference (pp. 63-72). Association for the Advancement of Computing in Education (AACE).

Decker, A., **Margulieux, L. E.**, & Morrison, B. B. (2019). Developing subgoal labels for imperative programming to improve student learning outcomes. In *Proceedings of the 2019 ASEE Annual Conference and Exposition*.

Lewis, C., Guzdial, M., **Margulieux, L. E.**, *Nelson, G.*, & Porter, L. (2019). Negotiating varied research goals in computing education research. In *Proceedings of the 50th ACM Technical Symposium on Computer Science Education* (pp. 500-501). New York, NY: ACM. doi: 10.1145/3287324.3287329

Morrison, B. B., Decker, A., & **Margulieux, L. E.** (2019). Using subgoal labeling in teaching CS1. In *Proceedings of the 50th ACM Technical Symposium on Computer Science Education* (pp. 1237). New York, NY: ACM. doi: 10.1145/3287324.3287540

Decker, A., Schneider, J., & **Margulieux, L. E.** (2018). How engineering and computing students demonstrate critical thinking during required co-op work experiences. In *Proceedings of the 2018 Frontiers in Education Conference.* doi: 10.1109/FIE.2018.8659164

Cohen, J., **Margulieux, L. E.**, Renken, M., Smith, S., & Jones, W. M. (2018). Maker Mindset: Measuring the Effect of Making. In Kay, J. and Luckin, R. (Eds.) *Rethinking Learning in the Digital Age: Making the Learning Science Count, 13th International Conference of the Learning Sciences (ICLS) Volume 3* (pp. 1505-1506). London, UK: International Society of the Learning Sciences.

Ericson, B., **Margulieux, L. E.**, & Rick, J. (2017). Solving Parsons problems versus fixing and writing code. Proceedings of *17th Koli Calling International Conference on Computing Education Research* (pp. 20-29). New York, NY: ACM. doi: 10.1145/3141880.3141895

Margulieux, L. E. (2017). Subgoal learning in online STEM instruction. In Smith, B. K., Borge, M., Mercier, E., and Lim, K. Y. (Eds.). *Making a Difference: Prioritizing Equity and Access in CSCL, 12th International Conference on Computer Supported Collaborative Learning (CSCL) 2017 Volume 1*. (pp. 932-933), Philadelphia, PA: International Society of the Learning Sciences.

Margulieux, L. E., & Catrambone, R. (2016). Using subgoal learning and self-explanation to improve programming education. In A. Papafragou, D. Grodner, D. Mirman, & J.C. Trueswell (Eds.), *Proceedings of the 38th Annual Conference of the Cognitive Science Society* (pp. 2009-2014). Austin, TX: Cognitive Science Society.

Schaeffer, L. M., **Margulieux, L. E.**, & Catrambone, R. (2016). Interaction of instructional materials order and subgoal labels on learning in programming. In A. Papafragou, D. Grodner, D. Mirman, & J.C. Trueswell (Eds.), *Proceedings of the 38th Annual Conference of the Cognitive Science Society* (pp. 271-276). Austin, TX: Cognitive Science Society.

Margulieux, L. E., Morrison, B. B., Guzdial, M., & Catrambone, R. (2016). Training learners to self-explain: Designing instructions and examples to improve problem solving. In *Proceedings of Transforming Learning, Empowering Learners: The International*

Conference of the Learning Sciences (ICLS) 2016. International Society of the Learning Sciences [online].

Morrison, B. B., **Margulieux, L. E.**, Ericson, B., & Guzdial, M. (2016). Subgoals help students solve Parsons problems. In *Proceedings of ACM's SIG Computer Science Education Technical Symposium* (pp. 42-47). New York, NY: ACM. doi: 10.1145/2839509.2844617

Margulieux, L. E. & Catrambone, R. (2015). Varying effects of subgoal labeled procedural instructions in STEM learning [Abstract]. *Proceedings of the 37th Annual Meeting of the Cognitive Science Society,* 2942.

Margulieux, L. E., McCracken, W. M., & Catrambone, R. (2015). Mixing in-class and online learning: Content meta-analysis of outcomes for hybrid, blended, and flipped courses. In O. Lindwall, P. Hakkinen, T. Koschmann, P. Tchounikine, & S. Ludvigsen (Eds.) *Exploring the Material Conditions of Learning: The Computer Supported Collaborative Learning (CSCL) Conference* (pp. 220-227)*, 2*. Gothenburg, Sweden: The International Society of the Learning Sciences.

Margulieux, L. E. & Catrambone, R., (2014). Improving programming instruction with subgoal labeled instructional text. In P. Bello, M. Guarini, M. McShane, & B. Scassellati (Eds.) *Proceedings of the 36th Annual Conference of the Cognitive Science Society* (pp. 952-957). Austin, TX: Cognitive Science Society.

Margulieux, L. E., Bujak, K. R., McCracken, W. M., & Majerich, D. (2014). Hybrid, blended, flipped, and inverted: Defining terms in a two-dimensional taxonomy [Online]. *Proceedings of the 12th Annual Conference of the Hawaii International Conference on Education* (pp. 2394-2402).

Margulieux, L. E., Catrambone, R., & Guzdial, M. (2013). Subgoal labeled worked examples improve K-12 teacher performance in computer programming training. In M. Knauff, M. Pauen, N. Sebanz, & I. Wachsmuth (Eds.) *Proceedings of the 35th Annual Conference of the Cognitive Science Society* (pp. 978-983). Austin, TX: Cognitive Science Society.

Desmond, P. A., **Margulieux, L. E.**, English, A. B., Burbey, A. L., & Matthews, G. (2010). Emotional intelligence and driver stress. In *Proceedings of the Human Factors and Ergonomics Society.*

Bollich, K. L., Mathis, S. E., Laas, W. L., Giuliano, T. A., & **Margulieux, L. E.** (2010). Perceived effectiveness of strategies for improving perceptions of shy individuals. In *Proceedings of the Association for Psychological Science*.

Unrefereed Publications

Morrison, B. B., Decker, A., **Margulieux, L. E.**, Bart, A. C. (2022). Subgoals for CS1 in Python. In *Proceedings of the 2022 ACM Conference on International Computing Education Research,* Volume 2 (pp. 44-45). doi: 10.1145/3501709.3544283

Yadav, A., Connolly, C., Berges, M., Chytas, C., Franklin, C., Hijón-Neira, R., Leftwich, A., **Margulieux, L.**, Macann, V., & Warner, J. R. (2022). Models for computer science teacher preparation: Developing teacher knowledge. In *Proceedings of the 27th ACM*

Conference on Innovation and Technology in Computer Science Education (ITiCSE '22), 2. 568–569. doi: 10.1145/3502717.3532166

Margulieux, L. E., & Morrison, B. B. (2019). Guest editorial on special issue: Advancing theory about the novice programmer. *Computer Science Education. 29*(2-3), 103-105. doi: 10.1080/08993408.2019.1613091

Margulieux, L. E. (2018). Effects of subgoal labeled expository text differ across programming, statistics, and chemistry. *Annual Meeting of the American Education Research Association.*

Peek, M. E., Majerich, D. M., **Margulieux, L. E.**, Stephens, A. B., Braga, R. A., & Madden, A. (2015). Teaching college faculty to interconnect chemistry and biochemistry experiments via the "Threading Flavones" project. In *Proceedings of the Chemistry Education Research & Practice of the Gordon Research Conference*.

Margulieux, L. E. & Catrambone, R. (2014). Subgoal labels in worked examples, but not general text, aid statistics learning [Abstract]. *Abstracts of the Psychonomic Society*, *19*, 129.

Margulieux, L. E. & Catrambone, R. (2013). Multidimensional scaling for comparing problem solving knowledge to an ideal [Abstract]. *Abstracts of the Psychonomic Society*, *18*, 191.

Margulieux, L. E., Catrambone, R., & Guzdial, M. (2012). Subgoals improve performance in computer programming construction tasks [CD]. *Proceedings of the EARLI SIG 6&7 Conference* (pp. 60-62).

Margulieux, L. E., Giuliano, T. A., Bollich, K. L., Mathis, S. E., & Laas, W. L. (2010). Introverted but not shy: A new perspective on the measurement of introversion. In *Proceedings of the Southwestern Psychological Association*.

Mathis, S. E., Laas, W. L., Bollich, K. L., Giuliano, T. A., & **Margulieux, L. E.** (2010). Shy to "fly": Testing the effectiveness of self-presentation strategies of shy individuals. In *Proceedings of the Southwestern Psychological Association*.

Presentations

Invited Talks

Margulieux, L. E. (2022). *Building theory in computing education.* Presentation hosted by the Kenneth C. Griffin Computer Science for All Initiative at University of Florida. Gainesville, FL.

Margulieux, L. E. (2022). *The causal connection between spatial skills and STEM skills.* Presentation and workshop at the Spatial Skills Summit, hosted by the Centre for Computer Science Education, University of Glasgow, Glasgow, Scotland (virtual).

Margulieux, L. E. (2022). *Investing in our future: 1000x impact.* Interviewed by B. Paul for the DEI Innovation Summit presented by Snap Inc. (virtual). https://youtu.be/FNnlPFiKbxY

Margulieux, L. E. (2022). *Computing education research methods and design.* Presentation to the Computers + Education Research Seminar hosted by University of Illinois at Urbana-Champaign. Champaign, IL (virtual).

Margulieux, L. E. (2022). *Engineering education research methods and design.* Presentation and workshop hosted by The Ohio State University's Engineering Education Department. Columbus, OH (virtual).

Margulieux, L. E. (2022). *Building theory in STEM education: Multiple conceptions theory.* Presentation at the Scottish Informatics & Computer Science Alliance (SICSA) Distinguished Speaker Seminar, Centre for Computer Science Education, University of Glasgow, Glasgow, Scotland.

Margulieux, L. E. (2022). *Computing education research methods and design.* Presentation and workshop at the Scottish Informatics & Computer Science Alliance (SICSA) Distinguished Speaker Seminar, Centre for Computer Science Education, University of Glasgow, Glasgow, Scotland.

Margulieux, L. E. (2022). *Building theory in STEM education.* Presentation at the GVU Brown Bag Series, Georgia Institute of Technology, Atlanta, GA (virtual).

Margulieux, L. E. (2021). *Building theory in computing education.* Presentation hosted by Michigan State University's Educational Psychology and Educational Technology program. East Lansing, MI.

Margulieux, L. E. (2021). *Building theory in STEM education.* Presentation to University of Michigan's Cognitive Science Seminar. Ann Arbor, MI.

Margulieux, L. E. (2021). *Building theory in computing education.* Presentation to the Brown University Computing Education Group. Providence, RI (virtual).

Margulieux, L. E. (2021). *Learning sciences and computing education research: Theory and research design.* Presentation to the Brown University Computing Education Group. Providence, RI (virtual).

Margulieux, L. E. (2020). *Learning sciences and computing education research: Theory and research design.* Keynote to the CSEdGrad Conference (virtual). Recording available at https://www.csedgrad.org/conference

Margulieux, L. E. (2020). *Online and hybrid instruction for computer science classrooms.* Presentation to the Raspberry Pi Foundation Research Symposium. London, UK (virtual). Recording available at https://www.raspberrypi.org/computing-education-research-online-seminars/#online-and-hybrid-instruction-for-computer-science-classrooms

Margulieux, L. E., & Goel, A. (2019). *Blended learning in practice.* Presentation to the Provost Teaching and Learning Fellows, Center for Teaching and Learning, Georgia Institute of Technology, Atlanta, GA.

Margulieux, L. E. (2019). *Mixing face-to-face and online learning: Instructional methods that affect learning.* Presentation to the Cognitive Science Seminar Series, Psychology Department, Georgia State University, Atlanta, GA.

Margulieux, L. E. (2018). *Helping computer science students, especially online learners, become better problem solvers.* Presentation at the GVU Brown Bag Series, Georgia Institute of Technology, Atlanta, GA.

Margulieux, L. E. (2017). *Mixing face-to-face and online learning: Instructional methods that affect learning.* Presentation to the College of Information Science and Technology, University of Nebraska Omaha, Omaha, NE.

Margulieux, L. E. (2014). *Mixing face-to-face and online learning: Instructional methods that affect learning.* Presentation at the C21U Seminar Series, Atlanta, GA. https://www.youtube.com/watch?v=fd0o96s3Utc

Margulieux, L. E. (2013). Hybrid, blended, flipped, and inverted classrooms: What do they mean and why do they matter? Presentation at the GVU Brown Bag Series, Georgia Institute of Technology, Atlanta, GA.

Workshops and Panels

DeLyser, L. A. (moderator), Camos, S., & Margulieux, L. E., (2022). All Teachers Learn CS: Pre-Service Education Models. Panel presented at CSEdCon hosted by Code.org, Fort Lauderdale, FL.

DeLyser, L. A. (moderator), Israel, M., Karlin, M., Margulieux, L. E., Villa, E. (2022). CSforEd: Schools of Education Implementing Computer Science Education. Panel presented by CSforALL (online).

Pinder, N., Sykora, C., Margulieux, L. E., & Cox, B. (2022). *Digital Problem-Solving: Integrating Computational Thinking Across the Curriculum.* Panel presented at the International Society for Technology in Education Conference. New Orleans, LA.

Sykora, C., Pinder, N., Margulieux, L. E., & Cox, B. (2022). *Bringing Computational Thinking to More Content Areas by Inviting Curriculum Leaders to the Conversation.* Panel presented at the International Society for Technology in Education Conference. New Orleans, LA.

Henson, C. (moderator), Aguda, A., Margulieux, L. E., & Vo, T. (2022). *Women's Leadership in STEM*. Panel hosted by the Georgia State Women's Philanthropy Network and Alumni Association. Atlanta, GA. https://giving.gsu.edu/wpn-events/

Margulieux, L. E. (2022). *Drawing with Geometry: Creative and Technical Skills in Computing Integration Activities.* Workshop at the Academy for Future Teachers, Atlanta, GA.

Margulieux, L. E. (2022). *Integration of Computing Education to Support Learning Objectives in English, Math, and Science*. Workshop at the CS4GA CS Summit: Computing as a Fundamental Literacy, Atlanta, GA (virtual).

Margulieux, L. E. (moderator), Beck, A. D., Caldwell, J., & Leftwich, A. (2022). *Integration of Computing Education*. Panel at the CS4GA CS Summit: Computing as a Fundamental Literacy, Atlanta, GA (virtual).

Iyer, S., Gozem, S., Margulieux, L. E., Ouellet, M., & Skums, P. (2021). *NSF CAREER Awards: Tips and Advice for Proposal Preparation.* Panel hosted by Georgia State University's Office of University Research Services and Administration. Atlanta, GA (virtual).

Sykora, C., Pinder, N., Margulieux, L. E., Calandra, B., & Cox, B. (2021). *Computational Thinking Competencies and Microcredentials in Preservice.* Panel presented at the International Society for Technology in Education Conference (virtual).

Margulieux, L. E. (2021). *Drawing with Geometry: Creative and Technical Skills in Computing Integration Activities.* Workshop at the Academy for Future Teachers, Atlanta, GA (virtual).

Diaz, L. (moderator), Carpenter-Powell, R., England, H., Fluellen, M., & Margulieux, L. E. (2021). *GA CS Educators Speak Up and Speak Out about CS Ed.* Panel at the CS4GA CS Summit: Beyond Access, Atlanta, GA (virtual).

Chen, D-W., & Margulieux, L. E. (2021). *HFES Getting a Job.* Panel at Human Factors and Ergonomics Society meeting, Atlanta, GA (virtual).

Diaz, L. (moderator), Margulieux, L. E., & Payton, J. (2020). *Broadening Participation in Computing and Teacher Credentialing: An Interview with Jamie Payton and Lauren Margulieux*. Panel at CSTA and Constellations Virtual Computer Science PD Summit, Atlanta, GA (virtual).

Margulieux, L. E. (2020). *Activities that Integrate Computing to Solve Problems in Other Disciplines.* Presentation to the CSTA and Constellations Virtual Computer Science PD Summit, Atlanta, GA (virtual).

Shapiro, R. B., Margulieux, L. E., Holbert, N., Searle, K., Tissenbaum, M., & DiSalvo, B. (2020). *Expanding the Field: How the Learning Sciences Might Further Computing Education Research.* Workshop at International Conference of the Learning Sciences, Nashville, TN (virtual).

Lewis, C. M., Margulieux, L. E., et al. (2020). *The Cambridge Handbook of Computing Education Research Summarized in 75 Minutes*. Panel at the 51st ACM Technical Symposium on Computer Science Education, Portland, OR (virtual). Recording available at https://www.youtube.com/watch?v=vcMFNTge2yQ&t=12s

Decker, A., Morrison, B. B., & Margulieux, L. E. (2020). *Using Subgoal Labeling in Teaching Introductory Programming*. Workshop at Consortium for Computing Sciences in Colleges – Northeastern Conference, Buffalo, NY.

DeLyser, L. A., Baskin, J., Childs, J., & Margulieux, L. E., (2019). *Finding a Home for Computer Science in Colleges of Education.* Panel at the CSforAll Summit, Salt Lake City, UT.

Margulieux, L. E. (2019). *Computational Thinking and Computing Integration.* Workshop for the GTRI Explorers' Guild, Atlanta, GA.

Margulieux, L. E., Kadel, R., & Goel, A. (2019). *Blended Learning in Practice.* Panel hosted by the Center for 21st Century Universities, Georgia Institute of Technology, Atlanta, GA.

Morrison, B. B., Decker, A., & Margulieux, L. E. (2019). *Using Subgoal Labeling in Teaching CS1.* Workshop at 50th ACM Technical Symposium on Computer Science Education, Minneapolis, MN.

Cox, B., Margulieux, L. E., Haynes, M., & Hoptroff, S. (2018). *A More Holistic Approach to Computer Science.* Panel at the Future Workforce Conference hosted by honorCode, Atlanta, GA.

Conference Presentations as Presenting Author

Prather, J., Margulieux, L. E., Whalley, J., Denny, P., Reeves, B. N., Becker, B., Singh, P., *Powell, G.*, & Bosch, N. (2022, August). Getting by with help from my friends: Group study in introductory programming understood as socially share regulation. Paper presented at the Eighteenth Annual Conference on International Conference on International Computing Education Research. Lugano, Switzerland.

Margulieux, L. E., Denny, P., Cunningham, K., *Deutsch, M.,* & Shapiro, B. (2021, August). When wrong is right: The instructional power of multiple conceptions. Paper presented at the Seventeenth Annual Conference on International Computing Education Research. Charleston, SC. (online due to COVID-19). https://youtu.be/a-EPI0LQMQ8

Prather, J., Becker, B., Craig, M., Denny, P., Loksa, D., & Margulieux, L. E. (2020, August). *What do we think we think we are doing?: Metacognition and self-regulation in programming*. Paper presented at the Sixteenth Annual Conference on International Computing Education Research. Dunedin, New Zealand (virtual). https://youtu.be/5jL4n0QH8qE

Margulieux, L. E., & Yadav, A. (2020, April). *Middle science computing integration with preservice teachers.* Paper presented at the Society for Information Technology and Teacher Education 2020 Conference. New Orleans, LA (virtual).

Margulieux, L. E. (2019, August). *Spatial Encoding Strategy theory: The relationship between spatial skill and STEM achievement*. Paper presented at the Fifteenth Annual International Conference on International Computing Education Research. Toronto, Canada.

Margulieux, L. E., Decker, A., & Morrison, B. B. (2019, April). *Subgoal labels effect on problem solving processes in CS1*. Poster presented at the Computer Science + Learning Sciences Symposium at Northwestern University. Evanston, IL.

Lewis, C., Guzdial, M., Margulieux, L. E., *Nelson, G.*, & Porter, L. (2019, February). *Negotiating varied research goals in computing education research*. Panel presented at the 50th SIGCSE Technical Symposium. Minneapolis, MN.

Morrison, B. B., Decker, A., & Margulieux, L. E. (2019, February). *Using subgoal labeling in teaching CS1*. Workshop presented at the 50th SIGCSE Technical Symposium. Minneapolis, MN.

Cohen, J., Margulieux, L. E., Renken, M., Smith, S., & Jones, W. M. (2018, June). *Maker Mindset: Measuring the Effect of Making.* Poster presented at International Conference of the Learning Sciences. London, UK.

Margulieux, L. E. (2018, April). *Effects of subgoal labeled expository text differ across STEM domains.* Paper presented at the Annual Meeting of the American Education Research Association. New York, NY.

Margulieux, L. E., & Catrambone, R. (2017, August). *Using learners' self-explanations to guide initial problem solving.* Paper presented at the Thirteenth Annual International Conference on International Computing Education Research. Tacoma, WA.

Margulieux, L. E., & Catrambone, R. (2016, August). *Using subgoal learning and self-explanation to improve programming education.* Paper presented at the 38th Annual Conference of the Cognitive Science Society. Philadelphia, PA.

Schaeffer, L. M., Margulieux, L. E., & Catrambone, R. (2016, August). *Interaction of instructional materials order and subgoal labels on learning in programming.* Poster presented at the 38th Annual Conference of the Cognitive Science Society. Philadelphia, PA.

Margulieux, L. E., Morrison, B. B., Guzdial, M., & Catrambone, R. (2016, June). *Training learners to self-explain: Designing instructions and examples to improve problem solving.* Paper presented at the International Conference of the Learning Sciences. Singapore.

Margulieux, L. E. & Catrambone, R. (2015, July). *Varying effects of subgoal labeled procedural instructions in STEM learning.* Poster presented at the 37th Annual Meeting of the Cognitive Science Society. Pasadena, CA.

Margulieux, L. E., McCracken, W. M., & Catrambone, R. (2015, June). *Mixing in-class and online learning: Content meta-analysis of outcomes for hybrid, blended, and flipped courses*. Paper presented at the 11th International Conference on Computer Supported Collaborative Learning. Gothenburg, Sweden.

Margulieux, L. E. & Catrambone, R. (2014, November). *Subgoal labels in worked examples, but not general text, aid statistics learning*. Poster presented at the 55th Annual Meeting of the Psychonomic Society. Long Beach, CA.

Margulieux, L. E. & Catrambone, R. (2014, March). *Improving problem solving performance in computer-based learning environments through subgoal labels.* Poster presented at the 1st ACM Conference on Learning @ Scale. Atlanta, GA.

Margulieux, L. E. & Catrambone, R. (2013, November). *Multidimensional scaling for comparing problem solving knowledge to an ideal*. Poster presented at the 54th Annual Meeting of the Psychonomic Society. Toronto, Canada.

Margulieux, L. E., Catrambone, R., & Guzdial M. (2013, August). *Subgoal labeled worked examples improve K-12 teacher performance in computer programming training*. Paper presented at the 35th Annual Conference of the Cognitive Science Society. Berlin, Germany.

Margulieux, L. E., & Catrambone R. (2013, June). *Teaching subgoals to improve problem solving in engineering*. Poster presented the 2013 ASEE Annual Conference and Exposition. Atlanta, GA.

Margulieux, L. E., Catrambone, R., & Guzdial, M. (2012, September). *Subgoals improve performance in computer programming construction tasks*. Poster presented at the meeting of European Association for Research on Learning and Instruction SIG Learning and Instruction with Computers. Bari, Italy.

Margulieux, L. E., Giuliano, T. A., Bollich, K. L., Mathis, S. E., & Laas, W. L. (2010, April). *Introverted but not shy: A new perspective on the measurement of introversion.* Poster presented at the meeting of Southwestern Psychological Association. Dallas, TX.

TEACHING AND ADVISING

Teaching

Courses Taught

Computational Thinking and Human-Computer Interaction, LT 7501, Georgia State

Digital and Information Literacy, LT 7500, Georgia State

Theoretical and Cognitive Foundations of the Learning Sciences, LT 8100, Georgia State

Doctoral Research Seminar, LT 9850, Georgia State

Computer Skills for the Information Age, LT 2010, Georgia State

Critique of Education Research, LT 9900, Georgia State

Instructional Design, LT 7100, Georgia State

Engineering Psychology, PSY 2014, Georgia Tech

*Research Methods, PSY 2015, Georgia Tech

*Nominated for Outstanding Graduate Student Instructor

Introduction to Psychology, PSY 1011 (co-instructor), Georgia Tech

Courses Created

LT 8100 Theoretical and Cognitive Foundations of the Learning Sciences

LT 4010 Computing and Human-Computer Interaction

**LT 7500 Digital and Information Literacy

**LT 7501 Computational Thinking and Human-Computer Interaction

**LT 7502 Computer Science Instructional Methods

**LT 7503 Computer Science Concepts for Teachers

**Part of the Computer Science Teacher Endorsement

Textbook

Calandra, B. D., & **Margulieux, L. E.** (2020). *Digital Skills for the Knowledge Economy, 4th edition*. Dubuque, IA: Kendall Hunt.

Calandra, B. D., & **Margulieux, L. E.** (2017). *Digital Skills for the Knowledge Economy, 3rd edition*. Dubuque, IA: Kendall Hunt.

Advising

Doctoral Committees * Committee Chair

Completed

Charles Hampton, Learning Technologies, Dissertation passed April 2022
Examining Workplace Informal Learning, Years of Professional Experience, and Occupational Self-Efficacy among University ICT Workers

Aaron Rafter, Learning Technologies, Dissertation passed April 2021
Examining the Use of Spreadsheets in a Highschool Statistics Course as it Relates to Participant Knowledge and Attitudes

Rodrigo Duran, Aalto University (Helsinki, Finland), Pre-examination passed May 2020, Chair: Lauri Malmi
Cognitive Complexity of Comprehending Computer Programs

***Reeny Madathany**, Learning Technologies, Comprehensive exam passed April 2020

Julia Huprich, Learning Technologies, Dissertation passed March 2020
Competencies for Customer Education Professionals in Software-As-A-Service Organizations: A Multi-Phase Analysis

Eric Sembrat, Learning Technologies, Dissertation passed February 2020
A Review and Analysis of Process at the Nexus of Instructional and Software Design

Michael Maxwell, Learning Technologies, Comprehensive exam passed May 2019

***Mary "Dorinda" Paige**, Learning Technologies, Comprehensive exam passed Dec. 2018

Solomon Betanga, Mathematics Education, Dissertation passed November 2018
The effects of mathematical modeling instruction on precalculus students' performance and attitudes toward rational functions

Ryan Cheek, Learning Technologies, Dissertation passed October 2018
An examination of pre-major health student's readiness for interprofessional education at a technical college

Jamie Bernhardt, Learning Technologies, Comprehensive exam passed July 2018

Aysegul Gok, Learning Technologies, Dissertation passed July 2018
Examining game-like design elements and student engagement in an online asynchronous course for undergraduate university students

***Julian Allen**, Learning Technologies, Dissertation passed April 2018
Faculty approaches to active learning: Barriers, affordances, and adoption

Merrin Oliver, Educational Psychology, Dissertation passed April 2017
Investigating individual differences in the conceptual change of biology misconceptions using computer-based explanation activities

In Progress

***Bryan Cox**, Learning Technologies, Comprehensive exam passed February 2019

***Gozde Cetin**, Learning Technologies, Comprehensive exam passed November 2022

***Masoumeh "Marya" Rahimi**, Learning Technologies, Coursework started January 2023

Lance Armistead, Learning Technologies, Prospectus passed January 2022

Lauren Coleman, Early Childhood and Elementary Education, Prospectus passed August 2022

Paulina Haduong, Harvard University (Cambridge, Massachusetts), Proposal stage, Chair: Karen Brennan

Crystal Bundrage, Learning Technologies, Prospectus passed November 2021

Tia Forbes, Learning Technologies, Comprehensive exam passed May 2021

Mentoring

Doctoral Advisor, 3 current students, 1 PhD graduate 2016 – present
Undergrad Research Assistant Manager, PSET Lab, Georgia Tech 2012-16
Undergraduate Senior Thesis Advisor, Georgia Tech 2013-14
Grand Challenges Group Facilitator, Georgia Tech 2013-14
Peer Academic Mentor, Content Writer, Southwestern University 2009-10

SERVICE

National and Professional Community

Associate Editor, *Computer Science Education* journal 2022-present

Advisory Board Member, *Spatial Skill Training in Scottish Primary Schools* 2022-2024
Project leaders: Quintin Cutts and Jack Parkinson (University of Glasgow)

Senior Program Committee Member, ICER Conference 2020-2023

Co-chair, Works in Progress Workshop, ICER Conference 2022 & 2023

ITiCSE Working Group Member, Models for Computer Science Teacher Preparation: Developing Teacher Knowledge 2022

Co-chair, Doctoral Consortium, ICER Conference 2020 & 2021

CSTA Working Group Member, Guidance for Schools of Education 2020
https://csteachers.org/page/guidance-for-schools-of-education

Guest Editor, Special Issue on Advancing Theory about the Novice Programmer, *Computer Science Education* 2018-19

Mentor, Doctoral Consortium, ICER Conference 2019

Advisory Board Member, *Acquainting Metro Atlanta Youth with STEM* 2017-18
National Science Foundation, Innovative Technology Experiences for Students and Teachers (ITEST) program, PI: Brendan Calandra

Invitation-only National Meetings
Piecing Together the Next 15 Years of Computing Education Research, sponsored by NSF, https://cerfutureworkshop.wordpress.com/ 2020-2022
CSforAll Knowledge Forum, sponsored by CSforAll 2018
Finding a Home for Computing in Schools of Ed, sponsored by CSforAll 2017-2018

Reviewer
National Science Foundation Review Panels (Grant)
CAREER (2022)
EHR CORE (2022)
AISL (2021)
CS for All (2020)
DRK-12 (2019, 2020)
Cyberlearning (2018)

Institute of Education Sciences External Reviewer (Grant)
Computers & Education (Journal)
Computer Science Education (Journal)
Transactions on Computing Education (Journal)
Journal of College Science Teaching (Journal)
PLOS One (Journal)
Computational Thinking as Subject or Across Subjects (Book)
International Computing Education Research (Conference)
International Conference of the Learning Sciences (Conference)
ACM Southeast (Conference)
ACM SIG Computer Human Interaction (Conference)

State and Local Community

Member, CS Advisory Council, Georgia Department of Education	2018-present
Contributor, Three-Year Strategic Planning Session organized by Georgia Department of Education and CS4GA	2021
Contributor, Three-Year Strategic Planning Session organized by Georgia Department of Education and CS4GA	2019
Writer, Development team for K-8 Georgia Standards of Excellence for Computer Science organized by Georgia Department of Education	2018
Contributor, State-level Planning Meeting for computing education, sponsored by Code.org	2017

Department, College, and University

Program Director, Learning Technologies	2023-present
Program Coordinator, Computer Science Teacher Endorsement	2018-present
Tech Fee Committee, Review proposals for distributing tech fee funds	2018-present
Learning Technologies Rep, Research Resources Steering Committee	2022-present
Program Coordinator, Instructional Design and Technology Ph.D.	2018-22
Chair, Tenure-Track Faculty Search Committee, Dept. of Learning Sciences	2019, 2020, 2022

Professional Memberships

American Educational Research Association, Division C – Learning and Instruction

Association for Computing Machinery, SIG Computer Science Education

International Society of the Learning Sciences

CONSULTING

Georgia Department of Education, Atlanta, Georgia June – August 2022
- Designed computing integration content and activities for 8th grade science courses

Georgia Public Broadcasting, Atlanta, Georgia May 2022 – May 2023
- Aligned Georgia K-8 CS standards to educational games in Gasha Go environment
- Supported all elements of production cycle from concept creation to testing and release

Maryland Center for Computing Education, Frederick, Maryland July 2022
- Led teacher professional learning session on computational thinking and integrated computing
- Scaffolded hack-a-thon-type activity for teachers to create computing integration activities

Georgia Department of Education, Atlanta, Georgia April – July 2021
- Created course about human-computer interaction for online teacher professional learning
- Designed content and activities for implementation in Canvas hosted by Georgia Virtual

Georgia Department of Education, Atlanta, Georgia March – August 2019
- Planned implementation aids for newly created K-8 CS standards
- Led development of sample curriculum for Middle School Computer Science I course

Human Interfaces, Inc., Austin, Texas August 2010 – July 2011
- Tested software and hardware using Human Factors methodologies
- Analyzed results by coding qualitative data and using SPSS for quantitative data
- Wrote and peer reviewed reports about methodology and results to deliver to clients
- Designed website with interdisciplinary team http://www.austintechinsights.com/home.shtml

VISIBILITY AND MEDIA COVERAGE

Personal website: laurenmarg.com, includes pages for Research and Papers, Teaching, and Blog
- All-time views at end of 2021 = 25,989; All-time visitors = 14,208 from 134 countries

Publication Reference	Coverage
Snap Inc. Endowment	Snap Inc. DEI Innovation Summit (2022, November). *Investing in our future: 1000x impact.* Interviewed by Bish Paul, Snap's Global Head of DEI Industry Collaboration. https://youtu.be/FNnlPFiKbxY
Multiple	Codespec, Inc. (2022). Cited as evidence-based practices. https://www.codespec.org/about/
P12	Miedema, D. (2022, August). ICER Day 2: Tuesday August 9. *Daphne Miedema Blog.* https://daphnemiedema.nl/2022/08/17/icer-day2.html
P12	Ko, A. (2022, August). ICER 2022 Trip Report: Together Again, As Bits and Atoms. *Bits and Behavior*. https://medium.com/bits-and-behavior/icer-2022-trip-report-together-again-as-bits-and-atoms-7ccf0440d1ec
NSF EAGER	Miller, C. (2022, July). Margulieux Featured in Fierce Education Story on Computational Thinking Skills. *News as DLS.* https://education.gsu.edu/

	2022/07/21/margulieux-featured-in-fierce-education-story-on-computational-thinking-skills/
NSF EAGER	Teich, A. G. (2022, July). Teaching Computational Thinking Essential for Future College Students. *Fierce Education.* https://www.fierceeducation.com/teaching-learning/teaching-computational-thinking-essential-future-college-students
-	Vaughn, S. (2022, July). Margulieux Participates in Computer Science Teacher Preparation Meeting in Ireland. *News at DLS.* https://education.gsu.edu/2022/07/19/margulieux-participates-in-computer-science-teacher-preparation-meeting-in-ireland/
J19	Vaughn, S. (2022, May). Doctoral Student Bryan Cox Publishes First-Author Paper. *News at DLS.* https://education.gsu.edu/2022/05/20/doctoral-student-bryan-cox-publishes-first-author-paper/
-	Bikanga Ada, M. (2022, May). SICSA Education Distinguished Speaker Seminar at The University of Glasgow: Dr Lauren Margulieux. *SIGSA Blog*. https://www.sicsa.ac.uk/blog/sicsa-education-distinguished-speaker-seminar-at-the-university-of-glasgow-dr-lauren-margulieux/
P11	Miller, C. (2022, February). Research snapshot: Teaching with multiple conceptions. *Georgia State News Hub.* https://news.gsu.edu/2022/02/02/research-snapshot-teaching-with-multiple-conceptions/ Featured in *RoxxCloud* and *Spot on Georgia*
Snap Inc. Endowment	Stirgus, E. (2021, November). Snap gives Georgia State $5 million for diversity teacher effort. *The Atlanta Journal-Constitution.* https://www.ajc.com/education/snap-gives-georgia-state-5-million-for-diversity-teacher-effort/KEMAYLW6VJCK5K5TPBM3MIUICI/
Snap Inc. Endowment	Team Snap (2021, November). Investing in the Next Generation of Computer Science Educators. https://newsroom.snap.com/investing-in-the-next-generation-of-computer-science-educators
Snap Inc. Endowment	CSforALL (2021, November). Investing in Teacher Preparation for the Classrooms of Today. https://csforall.medium.com/investing-in-teacher-preparation-for-the-classrooms-of-today-c7dd7c41ab68
Snap Inc. Endowment	Jones, A. (2021, November). Georgia State Receives Major Gift to Fund Computer Science Education. *Georgia State News Hub.* https://news.gsu.edu/2021/11/03/georgia-state-receives-major-gift-to-fund-computer-science-education/ Featured in *Albany Herald, The McDuffie Progress, Johnson City Press, African Graduate, Spot On Georgia, Times Georgian, Daily Advent, Douglas County Sentinel, Griffin Daily News, Newsbreak*

NSF CAREER	Miller, C. (2021, October). Margulieux to Discuss NSF CAREER Award Experiences at Nov. 9 Faculty Webinar. https://education.gsu.edu/2021/10/01/margulieux-to-discuss-nsf-career-award-experiences-at-nov-9-faculty-webinar/
P11	Ko, A. (2021, August). ICER 2021: A Daily Dose of Digital Discourse. *Bits and Behavior.* https://medium.com/bits-and-behavior/icer-2021-a-daily-dose-of-digital-discourse-46ee6c8099cd
P11	Guzdial, M. (2021, August). ICER 2021 Preview: The Challenges of Validated Assessments, Developing Rich Conceptualizations, and Understanding Interest. *Computing Education Research Blog.* https://computinged.wordpress.com/2021/08/16/icer-2021-preview-the-challenges-of-validated-assessments-developing-rich-conceptualizations-and-understanding-interest/
-	Webb, I. (2021, July). Georgia State University Commits to Creating Data Literacy Curriculum for K-12 Instructors. https://blog.library.gsu.edu/2021/07/02/georgia-state-university-commits-to-creating-data-literacy-curriculum-for-k-12-instructors/
NSF EAGER	Turk, A. (2021, Spring). CEHD Faculty Establish Project to Increase K-12 Computational Literacy in Rural, Low-Income Communities Across Georgia. *Research & Innovation.* p.4.
C7	ACM SIGCSE Journal Club (2021, April). Learning Sciences for Computing Education. Sponsored by the University of Manchester. https://sigcse.cs.manchester.ac.uk/2021/03/10/sigman13/
Blog	Megía, N. S-M. (2020, November). The traffic lights metaphor. https://www.nachosm.com/blog-en/the-traffic-lights-metaphor
P10	Guzdial, M. (2020, September). Award-winning papers at ICER 2020 explore new directions and point towards the next work to do. *Computing Education Research Blog.* https://computinged.wordpress.com/2020/09/28/award-winning-papers-at-icer-2020-explore-new-directions-and-point-towards-the-next-work-to-do/
NSF EAGER	Turk, A. (2020, September). Calandra, Margulieux establish project to increase K-12 computational literacy. *Noteworthy*.
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