LuEttaMae (Lu) Lawrence

Ph.D. Candidate
Digital Environments for Learning, Teaching, & Agency
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EDUCATION

Ph.D., Digital Environments for Learning, Teaching, and Agency
Curriculum & Instruction
University of Illinois Urbana-Champaign | *Expected May 2020*
Dissertation: *Design and implementation of an orchestration tool: What does the design process look like and how does it impact the classroom?*

M.A., Digital Environments for Learning, Teaching, and Agency
Curriculum & Instruction
University of Illinois Urbana-Champaign | *May 2018*
Thesis: *Food for Thought: How interface design fosters collaborative data discussions*

B.F.A., Graphic Design
Iowa State University | *May 2015*

PUBLICATIONS
* = Student co-author

JOURNAL ARTICLES

Lawrence, L. & Mercier, E. (2019). Co-design of an orchestration tool: Supporting engineering teaching assistants as they facilitate collaborative learning. *Interaction Design and Architecture(s) Journal,* (42), 111-130.

ACCEPTED BOOK PROPOSALS

Cromley, J. G., Beretvas, S. N., & **Lawrence, L.** (2018). *Models of multimedia comprehension: A review and synthesis of the literature in STEM.* Book proposal accepted March, 2018. Springer.

BOOK CHAPTERS

Cromley, J. G., & **Lawrence, L.** (2018). Multimedia simulations that foster deep learning: Findings from a *review of the literature. R. Zheng (Ed.). Strategies for deep learning with digital technology: Theories and practices in education. Hauppauge, NY: Nova Science Publishers.*

CONFERENCE PROCEEDINGS

Shehab, S., **Lawrence, L.,** Tissenbaum, M., *Rui, Y., & *Hixon, T. (Submitted, 2020) Integrating human-centered design in post-secondary courses: Evaluating the first iteration. Nashville, TN: International Conference of the Learning Sciences.

Lawrence, L., Shehab, S., & Tissenbaum, M. (Submitted, 2020) Implementation of a human-centered design taxonomy with a novice, multidisciplinary design team. Nashville, TN: International Conference of the Learning Sciences.

Shehab, S., **Lawrence, L.**, & Tissenbaum, M. (Submitted, 2020) Integrating human-centered design in a food science capstone course: A case study. Nashville, TN: International Conference of the Learning Sciences.

Lawrence, L. (2019). Exploring the design process of an interdisciplinary team building a collaborative orchestration tool. *LSGS Conference 2019 Contexts, Complexity, and Communities: Reflecting on and Reshaping Research on Learning.* Chicago, IL: Learning Sciences Graduate Students Conference.

Lawrence, L., & Mercier, E. (2019). A review of the evolving definition of orchestration: Implications for research and design. In *A wide lens: Combining Embodied, Enactive, Extended, and Embedded Learning in Collaborative Settings.* Lyon, France: The International Society of the Learning Sciences.

Lawrence, L., Henderson, A. K., & Mercier, E. (2018). Exploring collaboration between designers and educational researchers to improve interdisciplinary research methods. *LSGS Conference 2018 Expanding Apprenticeship.* Bloomington, IN: Learning Sciences Graduate Students Conference.

Kelly, S. B., **Lawrence, L.**, & Mercier, E. (2017). Engaging everyday science data to help make sense of data. In *Making a Difference—Prioritizing Equity and Access in CSCL: The 12th International Conference on Computer Supported Collaborative Learning.* Philadelphia, USA: The International Society of the Learning Sciences.

Lawrence, L. & Mercier, E. (2017). Designing visualizations to monitor collaboration in engineering discussion sessions. In Vogel, C. & Muratovski, G. (Eds.), *Re: Research.* Cincinnati, OH: International Association of Societies of Design Research.

TEACHER RESOURCES

Lawrence, L., Shehab, S., Livingston, L., & Margotta, A. (2019). Collaborative teaching sequence: A guide for teachers. *CoLearnLab Resources.* https://www.colearnlab.org/resources

Kelly, S., **Lawrence, L.**, & Mercier, E. (2017). Food for Thought: User and resource guide. CoLearnLab Resources. https://www.colearnlab.org/resources

MANUSCRIPTS IN PROGRESS

Lawrence, L. (in preparation). *The evolving definition of orchestration and its implications for research and design: A systematic review.*

Lawrence, L., Shehab, S., Tissenbaum, M., *Rui, Y., & *Hixon, T. (in preparation). *Defining the human centered design approach to foster collaboration among non-designers.*

GRANTS RECEIVED

Hardie Dissertation Grant ($1,984)
Design and implementation of a supportive technology for teaching assistants.
Principal Investigator: **LuEttaMae Lawrence**
Funded *March 2019*

O'Leary Learning Center Grant ($1,000)
Designing interdisciplinary lessons around collaborative software for the middle school classroom
Principal Investigators: Susan Kelly, Megan Kessler, **LuEttaMae Lawrence**, & Jenn White
Funded *December 2017*

O'Leary Learning Center Grant ($1,000)
A new framework for implementing collaboration among designers and educational researchers
Principal Investigators: **LuEttaMae Lawrence** & Amanda Henderson
Funded *December 2017*

RESEARCH EXPERIENCE

Research Assistant | *January 2019 – Present*
Human Centered Design Assessment
Principal Investigators: Rachel Switzky & Mike Tissenbaum
Siebel Center for Design

Design Research Consultant | *January 2019 – Present*
Connections of Earth and Sky with Augmented Reality (CEASAR): Transforming Collaborative Learning Practices with Shared and Embedded Digital Models
Principal Investigators: Robb Lindgren, Nathan Kimball, Emma Mercier, & Jina Kang
National Science Foundation (1822796)

Design Research Consultant | *August 2018 – Present*
Parent-Child Collaborative Problem Solving in a Museum Exhibit
Principal Investigators: Emma Mercier
Campus Research Board (RB18110)

Research Assistant | *August 2017 – Present*
Improving Collaborative Learning in Engineering Classes Through Integrated Tools for Instructors and Students
Principal Investigators: Emma Mercier & Luc Paquette
National Science Foundation (1628976)

Research Assistant | *May 2017 – December 2018*
Meta-Analysis to Support an Integrated Theory of Multimedia Learning: An ECR Synthesis Proposal
Principal Investigators: Jennifer Cromley
National Science Foundation (1661231)

Research Assistant | *December 2015 – Aug 2017*
Fostering Collaborative Drawing and Problem Solving through Digital Sketch and Touch
Principal Investigators: Emma Mercier, Joshua Peschel, & Geoffrey Herman
National Science Foundation (1441149)

Research Assistant | *December 2015 – May 2017*
Computer Supported Collaborative Learning for the Development of Environmental Literacies
Principal Investigators: Emma Mercier
Campus Research Board (RB15253)

AWARDS

TIER-ED Graduate Research Award ($5,000) *May 2019.*

Graduate College Conference Travel Award ($350) *March 2019*

Hardie Conference Travel Support Award ($500) *March 2019*

Block Grant Conference Travel Award ($1,163) *March 2018*

Hardie Conference Travel Support Award ($500) *March 2017*

DELTA Travel Fellowship ($200) *March 2017*

APP DEVELOPMENT

Food for Thought: Your food, your footprint. © University of Illinois Board of Trustees – 2017.
https://apps.apple.com/us/app/food-for-thought-your-food-your-footprint/id1200031349

PRESENTATIONS

PEER REVIEW CONFERENCE PRESENTATIONS

Shehab, S., **Lawrence, L.**, Livingston, L., Margotta, A., & Mercier, E. (Submitted, 2020). Towards the effective implementation of collaborative problem solving in undergraduate engineering classrooms: Co-designing guidelines for teaching assistants. Paper submitted to the American Society for Engineering Education, Montreal, Quebec, Canada, June 21-24, 2020.

Lawrence, L., Shehab, S., & Mercier, E. (2020). Examining the use of a supportive orchestration tool by teaching assistants during collaborative problem solving. Paper presented at the American Educational Research Association, San Fransisco, CA, USA, April 17-21, 2020.

Mercier, E., Paquette, L., Bosch, N., **Lawrence, L.**, & Shehab, S. (2020). The development and implementation of an orchestration tool based on live action log data. Paper presented at the American Educational Research Association, San Fransisco, CA, USA, April 17-21, 2020.

Jung, J., Mercier, E., & **Lawrence, L.** (2019). Interrogating the tool design processes: Impact of practical needs in theory-driven tool design. Paper presented at the Association for Educational Communities & Technology, Las Vegas, NV, October 21-25, 2019.

Lawrence, L. & Shehab, S. (2019). Integrating technology to support teachers' monitoring and intervention strategies during collaborative activities. Paper presented at the Graduate Student Conference, Champaign, IL, March 8, 2019.

Lawrence, L., & Mercier, E. (2018). Designing for collaborative problem solving on multi-touch tables. Paper presented at the American Educational Research Association, New York, NY, USA, April 13-17, 2018.

Lawrence, L. (2018). Comparing visual design for teaching data literacy with multi-touch tables. Paper presented at the Graduate Student Conference, Champaign, IL, March 9, 2018.

Kelly, S., Mercier, E., & **Lawrence, L.** (2017). Student collaboration to build joint understanding of data. Paper presented at the annual meeting of the American Educational Research Association, St. Antonio, TX, USA, April 28-May 1, 2017.

Lawrence, L., Mercier, E., & Kelly, S. (2017). Designing for data literacy with collaboration and multi-touch technology. Poster at the annual meeting of the American Educational Research Association, St. Antonio, TX, USA, April 28-May 1, 2017.

WORKSHOPS

Shehab, S., **Lawrence, L.**, O'Bryan, L., & Switzky, R. (2019, June). *Bringing the human-centered design approach to the K-12 classrooms.* Workshop presented at the Illinois New Teacher Collaborative summer conference, Champaign, IL, USA, June 25-26, 2019.

Lawrence, L. (2017, October). *Communicating your research: Poster design.* LSGSC 2017 Conference Proceedings. Workshop presented at the meeting of the Learning Sciences Graduate Students Conference, Bloomington, IN, USA, October 18-19, 2017.

SYMPOSIUM ORGANIZER

Shehab, S., Ress Lewis, D., Tissenbaum, M., **Lawrence, L.**, & Easterday, M. (Submitted, 2020) Towards bringing human-centered design to K-12 and post-secondary classrooms. International Conference of the Learning Sciences, Nashville, TN.

INVITED PRESENTATIONS

What does the design process look like and how does it impact the classroom?, TIER-ED, Champaign, IL, *April 23, 2019*

Designing technology to educate students on the environmental impact of food, Food Science and Human Nutrition Graduate Student Association, Champaign, IL, *October 29, 2018*

Educational game design panel, Playful by Design Spring Symposium, Champaign, IL, *April 7, 2018.*

Designing your research: Academic poster design, Special Education Graduate Student Organization, Champaign, IL, *September 28, 2018.*

Designing for collaborative learning, Physics Education Research Group, Champaign, IL, *June 7, 2018.*

Designing your research: Academic poster design, DELTA Seminar, Champaign IL, *November 13, 2017*

TEACHING

Guest Lecturer, CI 590: DELTA Graduate Seminar; *Fall 2019*

Guest Critic, ArtD 471: Graphic Design Capstone; *Spring 2018 & Spring 2019*

Guest Lecturer, CI 590: Mobile Learning Technologies; *Spring 2017*

Curriculum Designer & Instructor, Summer Intensive Design Workshops; *June 2016 & June 2017*

Teaching Assistant, Art 301: Design Thinking for Non-Majors; *Fall 2015*

ACADEMIC SERVICE

COMMITTEES

Graduate Student Representative; Search Committee for Assistant Teaching Professor in Computer Science Education: *2019 - 2020*

Learning Sciences Graduate Student Conference; Review Committee: *2019*

CONFERENCE REVIEWER

American Educational Research Association Conference

International Association of Societies of Design Research Conference

International Conference on Computer Supported Collaborative Learning Conference

Learning Sciences Graduate Student Conference

BOOK AND JOURNAL REVIEWER

Interaction Design and Architecture Journal

R. Zheng (Ed.). *Strategies for deep learning with digital technology: Theories and practices in education* for Nova Science Publishers.

MEMBERSHIPS

American Educational Research Association (AERA)

Association for Educational Community and Technology (AECT)

International Association of Societies of Design Research (IASDR)

International Society of the Learning Sciences (ISLS)

PROFESSIONAL EXPERIENCE

Educational Design Consultant
LuEttaMae Lawrence
November 2015 – Present

Freelance Designer
LuEttaMae Lawrence
Selected Clients: John Deere, American Cancer Society, FyxIT, Seven Wonders Stables
September 2012 – June 2018

Graduate Design Intern
The Meyocks Group, West Des Moines, IA
June – August 2015

Graphic Design Intern
818 - A Tiny Design Empire, Des Moines, IA
March – June 2015

Graphic Designer
Iowa State Department of Music, Ames, IA
February 2014 – March 2015

Graphic Designer
Juls Design, Ankeny, IA
June – October 2014

Graphic Designer
Monument Wealth Management, Alexandria, VA
May 2013 – June 2014

REFERENCES

Dr. Emma Mercier
Associate Professor
Curriculum & Instruction
mercier [at] illinois.edu

Dr. Robb Lindgren
Associate Professor
Curriculum & Instruction
robblind [at] illinois.edu

Dr. Mike Tissenbaum
Assistant Professor
Curriculum & Instruction
miketiss [at] illinois.edu