

Kelly Findley, Ph.D.

CURRICULUM VITAE

Teaching Assistant Professor

Department of Statistics
The University of Illinois at Urbana-Champaign

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Champaign, IL 61820
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ACADEMIC INTERESTS

- The training and professional development of graduate teaching assistants and instructors in statistics
- Interweaving disciplinary practices into the introductory statistics curriculum
- Coordinating active learning opportunities and varied assessment in the context of large courses
- Strategic use of simulations to enrich students' conceptual understanding in statistics
- The nature of statistics and epistemology
- Resource views of knowledge and learning

EDUCATION

2015-2019

Ph.D. Curriculum & Instruction: Mathematics Education

Florida State University, Tallahassee, FL
Supervisors: Elizabeth Jakubowski & Ian Whitacre.

Findley, K. (2019). *Connecting disciplinary and pedagogical spaces in statistics: Perspectives from graduate teaching assistants*. Unpublished doctoral dissertation, Florida State University.

2013-2015

M.S. Statistics

Florida State University, Tallahassee, FL

2009-2013

B.A. Mathematics

Bryan College, Dayton, TN
Minors: Politics & Government, Music

APPOINTMENTS

2019 – Present

Teaching Assistant Professor

Department of Statistics
The University of Illinois at Urbana-Champaign

- Teach undergraduate courses for the statistics department
- Supervise training and professional development for teaching assistants and graduate student instructors
- Develop curricular materials in coordination with department instructors
- Conduct research in statistics education

2015-2018

Research Assistant

Teaching and Learning Algebraic Thinking Across the Middle Grades: A Research-based Approach Using PhET Interactive Simulations (NSF Grant #1503510)
Florida State University

- Prepared and reviewed curricular materials used in the project
- Interviewed teachers, recorded classes, and analyzed results

- 2013-2015 & 2018-2019 **Graduate Teaching Assistant**
Department of Statistics & School of Teacher Education
Florida State University
- Taught STA2171: Statistics for Biology, STA2122: Introduction to Applied Statistics, ISC3523: Research Methods, and EDF1005: Introduction to Education as instructor of record
 - Assisted with STA4321: Introduction to Mathematical Statistics, STA2023: Fundamental Business Statistics, and CGS2518: Excel Spreadsheets

REFEREED JOURNAL ARTICLES

- Findley, K.**, Whitacre, I., & Atabas, S. (2020). What's in a name? Leveraging students' informal vocabulary in probability. *Teaching Statistics*. 7 pages. <https://doi.org/10.1111/test.12250>
- Atabas, S., Schellinger, J., Whitacre, I., **Findley, K.**, & Hensberry, K. K. R. (2020). A tale of two sets of norms: Comparing opportunities for student agency in mathematics lessons with and without interactive simulations. *Journal of Mathematical Behavior*.
- Findley, K.** & Lyford, A., (2019). Investigating students' reasoning about sampling distributions through a resource perspective. *Statistics Education Research Journal*, 18(1), 26-45.
- Findley, K.**, Whitacre, I., Schellinger, J., & Hensberry, K. K. R. (2019). Orchestrating mathematics lessons with interactive simulations: Exploring roles in the classroom. *Journal of Technology and Teacher Education*, 27(1), 37-62.
- Whitacre, I., Hensberry, K. K. R., Schellinger, J., & **Findley, K.** (2018). Variations on play with interactive computer simulations: Balancing competing priorities. *International Journal of Mathematical Education in Science and Technology*, 50(5), 665-681. doi.org/10.1080/0020739X.2018.1532536
- Hensberry, K. K. R., Whitacre, I., **Findley, K.**, Schellinger, J., & Wheeler, M. B. (2018). Engaging students with mathematics through play. *Mathematics Teaching in the Middle School*, 24(3), 179-183.
- Whitacre, I., Atabas, S., & **Findley, K.** (2018). Exploring unfamiliar mathematical territory: Constraints and affordances in a preservice teacher's reasoning about fraction comparisons. *Journal of Mathematical Behavior*, 53, 148-163. doi.org/10.1016/j.jmathb.2018.06.006
- Findley, K.** (in progress). Navigating a disciplinary chasm: The statistical perspectives of graduate teaching assistants. 24 pages.

CONFERENCE PROCEEDINGS

- Berens, F., **Findley, K.**, & Hobert, S. (in press). Students' beliefs about statistics and their influence on students' attitudes toward statistics in introductory courses. *Proceedings of the 14th International Congress on Mathematical Education*. Shanghai, China.
- Whitacre, I., **Findley, K.** & Atabas, S. (2020). Productive seeds in preservice teachers' reasoning about fractions. In A. I. Sacristán & J. C. Cortés (Eds.), *Proceedings of the 42nd annual meeting of the*

North American Chapter of the International Group for the Psychology of Mathematics Education (pp. 1477-1484). Mazatlán, Mexico.

- Findley, K.** & Berens, F. (2020). Assessing the disciplinary perspectives of introductory statistics students. *Proceedings of the 23rd Annual Conference on Research in Undergraduate Mathematics Education* (pp. 1090-1095). Boston, MA.
- Findley, K.** & Kaplan, J. J. (2019). Is statistics just math? The developing epistemic views of graduate teaching assistants. In A. Weinberg, C. Rasmussen, J. Rabin, M. Wawro, & S. Brown (Eds.), *Proceedings of the 22nd Annual Conference on Research in Undergraduate Mathematics Education* (pp. 196-203). Oklahoma City, OK.
- Findley, K.** & Atabas, S. (2018). Middle-schoolers' construction of probabilistic vocabulary. In T. E. Hodges, G. J. Roy, & A. M. Tyminski (Eds.), *Proceedings of the 40th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 868-871). Greenville, SC.
- Atabas S., **Findley, K.**, & Schellinger, J. (2018). Using interactive simulations to think mathematically and engage in cognitively demanding tasks. In T. E. Hodges, G. J. Roy, & A. M. Tyminski (Eds.), *Proceedings of the 40th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 1091-1093). Greenville, SC.
- Findley, K.** & Kaplan, J. J. (2018). What is statistics? Examining the disciplinary beliefs of incoming statistics TAs. In M. A. Sorto, A. White, & L. Guyot (Eds.), *Looking back, looking forward. Proceedings of the Tenth International Conference on Teaching Statistics*, Kyoto, Japan.
- Findley, K.** & Kaplan, J. J. (2018). Cognitive resources in student reasoning about mean tendency. In A. Weinberg, C. Rasmussen, J. Rabin, M. Wawro, & S. Brown (Eds.), *Proceedings of the 21st Annual Conference on Research in Undergraduate Mathematics Education* (pp. 1345-1351). San Diego, CA.
- Findley, K.**, Whitacre, I., & Hensberry, K. K. R. (2017). Integrating interactive simulations into the mathematics classroom: Supplementing, enhancing, or driving? In E. Galindo & J. Newton (Eds.), *Proceedings of the 39th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 1297-1304). Indianapolis, IN.
- Whitacre, I., Hensberry, K. K. R. & **Findley, K.** (2017). Teachers' facilitation of play with PhET interactive simulations in middle-school mathematics lessons. In E. Galindo & J. Newton (Eds.), *Proceedings of the 39th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (p. 1386). Indianapolis, IN.
- Haider, M., Bouhjar, K., **Findley, K.**, Quea, R., Keegan, B., & Andrews-Larson, C. (2016). Using student reasoning to inform assessment development in linear algebra. In T. Fukawa-Connelly, N. E. Infante, M. Wawro, & S. Brown (Eds.), *Proceedings of the 19th Annual Conference on Research in Undergraduate Mathematics Education* (pp. 163-177). Pittsburgh, PA.

PRESENTATIONS

- Findley, K.** (April, 2020). *Assessment strategies in post-secondary education*. Guest lecture for EOL585: College Teaching. The University of Illinois at Urbana-Champaign. (Local)
- Findley, K. & Berens, F.** (February, 2020). *Assessing the disciplinary perspectives of introductory statistics students*. Presentation at 23rd Annual Conference, Research in Undergraduate Mathematics Education (RUME), Boston, MA. (National)
- Findley, K.** (May, 2019). *A slippery slope for new instructors: How introductory statistics turns into remedial mathematics*. Poster Presentation at 2019 United States Conference on Teaching Statistics (USCOTS), State College, PA. (National)
- Findley, K. & Kaplan, J. J.** (February 2019). *Is statistics just math? The developing epistemic views of graduate teaching assistants*. Presentation at 22nd Annual Conference, Research in Undergraduate Mathematics Education (RUME), Oklahoma City, OK. (National)
- Findley, K. & Kaplan, J. J.** (January 2019). *Is statistics just math? The developing epistemic views of graduate teaching assistants*. Presentation at the Joint Mathematics Meetings (JMM), Baltimore, MD (National)
- Findley, K. & Atabas, S.** (November 2018). *Middle-schoolers' construction of probabilistic vocabulary*. Presentation at the 40th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA), Greenville, SC. (International)
- Atabas S. & **Findley, K.**, & Schellinger, J. (November 2018). *Using interactive simulations to think mathematically and engage in cognitively demanding tasks*. Presentation at the 40th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA), Greenville, SC. (International)
- Findley, K. & Kaplan, J. J.** (July 2018). *What is statistics? Examining the disciplinary beliefs of incoming statistics TAs*. Presentation at 10th International Conference on the Teaching of Statistics (ICOTS), International Association of Statistics Education (IASE), Kyoto, Japan. (International)
- Findley, K.** (May 2018). *The statistical epistemologies of first year graduate teaching assistants*. Presentation at Electronic Conference on Teaching Statistics (eCOTS) 2018 North Florida Regional Conference, Consortium for the Advancement of Undergraduate Statistics Education (CAUSE), Gainesville, FL. (Regional)
- Findley, K.** (February 2018). *Cognitive resources in student reasoning about mean tendency*. Presentation at 21st Annual Conference, Research in Undergraduate Mathematics Education (RUME), San Diego, CA. (National)
- Burr, M., **Findley, K.**, & Whitacre, I. (October 2017). *Online simulations: What, how, and why?*. Presentation at Southern regional conference, National Council of Teachers of Mathematics (NCTM), Orlando, FL. (Regional)
- Findley, K.** (October 2017). *"Science-izing" the statistics standards*. Presentation at Southern regional conference, National Council of Teachers of Mathematics (NCTM), Orlando, FL. (Regional)

Findley, K., Whitacre, I., & Hensberry, K. K. R. (October 2017). *Integrating interactive simulations into the mathematics classroom: Supplementing, enhancing, or driving?* Presentation at 39th Annual Conference, Psychology of Mathematics Education – North America (PME-NA), Indianapolis, IN. (International)

Whitacre, I., Hensberry, K. K. R., & **Findley, K.** (October 2017). *Teachers' facilitation of play with PhET interactive simulations in middle-school mathematics lessons*. Poster Presentation at 39th annual meeting, North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA), Indianapolis, IN. (International)

Findley, K. (May 2017). *Student-driven simulations for the statistics classroom*. Poster Presentation at 2017 United States Conference on Teaching Statistics (USCOTS), State College, PA. (National)

Whitacre, I., Hensberry, K. K. R., & **Findley, K.** (February 2017). *Examining the play phase of mathematics lessons involving computer simulations*. Presentation at 21st Annual Conference, Association of Mathematics Teacher Educators (AMTE), Orlando, FL. (National)

Hollingsworth, L., **Findley, K.**, & Jakubowski, E. (January 2017). *Do college level mathematics courses support student success in introductory statistics?* Presentation at Joint Mathematics Meetings (JMM), Mathematics Association of America (MAA), Atlanta, GA. (National)

Findley, K., Burr, M., Whitacre, I., Schellinger, J., & Hensberry, K. K. R. (October 2016). *Discovering functions and geometric transformations with an interactive computer simulation*. Presentation at 2016 Annual Conference, Florida Council of Teachers of Mathematics (FCTM), Orlando, FL. (State)

Schellinger, J., Whitacre, I., Burr, M., Hensberry, K. K. R., & **Findley, K.** (October 2016). *Instructional approaches to support mathematical sense making using interactive simulations*. Presentation at 2016 Annual Conference, Florida Council of Teachers of Mathematics (FCTM), Orlando, FL. (State)

Findley, K. & Bose, R. (May 2016). *Investigating international statistics TAs' perceptions on pedagogy and professional development*. Presentation at Electronic Conference on Teaching Statistics (eCOTS) 2016 North Florida Regional Conference, Consortium for the Advancement of Undergraduate Statistics Education (CAUSE), Gainesville, FL. (Regional)

Haider, M., Bouhjar, K., **Findley, K.**, Quea, R., & Andrews-Larson, C. (February 2016). *Using student reasoning to inform assessment development in linear algebra*. Presentation at 19th Annual Conference, Research in Undergraduate Mathematics Education (RUME), Pittsburgh, PA (National)

COURSES TAUGHT

The University of Illinois at Urbana-Champaign

- STAT 420 – Methods in Applied Statistics
- STAT 212 – Biostatistics
- STAT 100 – Statistics

Florida State University

- EDF 1005 – Introduction to Education
- ISC 3523 – Research Methods
- STA 2122 – Introduction to Applied Statistics
- STA 2171 – Statistics for Biology

SUPERVISION OF GRADUATE STUDENT INSTRUCTION

Fall 2020 **Yun, S.** – STAT 212

SUPERVISION OF STUDENT RESEARCH OR INDEPENDENT STUDY

Graduate

2020-2021 **Mosely, B.** – Research on Students’ Beliefs about Experimental Design

Undergraduate

Fall 2020 **Pazmino, B.** – Creation of R coding tutorials using `learnr`

HONORS & AWARDS

2019-2020 **List of Instructors Ranked Excellent by their Students** – The University of Illinois at Urbana-Champaign
 2015-2018 **McDonald Scholar** – Florida State University
 2013-2015 **Legacy Fellow** – Florida State University
 Spring 2015 **Nomination for Outstanding Teaching Assistant Award** – Florida State University

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

- Mathematical Association of America (MAA)
- Special Interest Group in the Mathematical Association of America (SIGMAA) on Statistics Education (STAT-ED)
- Special Interest Group in the Mathematical Association of America (SIGMAA) on Research in Undergraduate Mathematics Education (RUME)
- International Association for Statistics Education (IASE)

SERVICE TO THE UNIVERSITY

The University of Illinois at Urbana-Champaign

2020 – Present **Courses and Curricula Committee** – College of Liberal Arts and Sciences
 2020 – Present **Student Appeals** – Department of Statistics
 2020 – Present **Timetable** – Department of Statistics
 2019 – Present **Teaching Assistant Training** – Department of Statistics

Florida State University

2018-2019 **President** - School of Teacher Education Graduate Student Association (STEGSA)
 2016-2018 **Treasurer** - School of Teacher Education Graduate Student Association (STEGSA)
 2016-2018 **Assistant and Mentor** - Teaching in the Discipline Workshop, Statistics Department

SERVICE TO THE PROFESSION

Guest Reviewer for Refereed Journals

2020 Mathematics Teacher
 2017 Science Education
 2017 Review of Science, Mathematics, and ICT Education

Service to Professional Organizations

2018-2019 **Proposal Reviewer** – Annual Conference on Research in Undergraduate Mathematics Education
 2018 **Paper Referee** – International Conference on the Teaching of Statistics
 2017, 2020 **Proposal Reviewer** – North American Chapter of the International Group for the Psychology of Mathematics Education

SERVICE TO THE COMMUNITY

2016-2019 **MathPal** – United Way, Tallahassee, FL
 2019 **Volunteer** – “Be My Neighbor” Day, Tallahassee, FL
 2015-2018 **Teacher** – The Tallahassee Math Circle
 2018 **Volunteer** – Mathematics Activity Days, Havana Public Library and Quincy Public Library
 2018 **Co-Coordinator** – Kangaroo Math Competition, Tallahassee FL
 2015, 2017 **Teacher of summer math/science courses** – Family Learning Center, Tallahassee Public Library
 2016 **Teacher for extended school year** – Second Chance Summer School Program, Ghazvini Learning Center
 2015 **Volunteer** – Math Fun Day, FSU Mathematics Department