

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

- Training and professional development for graduate TAs and instructors in statistics
- Teaching introductory statistics with R
- Students' beliefs about design and their evaluation of data-based claims
- Students' conceptions of statistics
- Epistemic change in relation to the nature of statistics
- 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 Unpublished doctoral dissertation, Florida State University.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

Summer 2021

Visiting Scholar

Center of Methods in Social Sciences
The University of Göttingen

- Co-teaching course on Data Collection and Analysis in the Social Sciences
- Conducting research on Students' Conceptions of Statistics

- 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
- 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
 - Contributed to the publication of 5 journal articles related to the project

REFEREED JOURNAL ARTICLES

- Findley, K.** (Accepted with Revisions). Navigating a disciplinary chasm: The statistical perspectives of graduate teaching assistants. *Statistics Education Research Journal*. 24 pages.
- Findley, K.**, Whitacre, I., & Atabas, S. (2020). What's in a name? Leveraging students' informal vocabulary in probability. *Teaching Statistics* 43(2). 72-78. <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
- Berens, F. & **Findley, K.** (in preparation). The diamond model of statistics: Framing student conceptions about our field.

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.** & Berens, F. (July, 2021). *Students' perspectives about statistics: Developing an instrument to capture beliefs about our field*. Presentation at International Statistical Institute's 63rd World Statistics Congress, Online. (International)
- Berens, F., **Findley, K.**, & Hobert, S. (July, 2021). Students' beliefs about statistics and their influence on students' attitudes toward statistics in introductory courses. *Presentation at the 14th International Congress on Mathematical Education*, Online. (International)
- Mosely, B., **Findley, K.**, & Flanagan, K. (July, 2021). *Understanding students' thoughts about experimental design*. Poster Presentation at 2021 United States Conference on Teaching Statistics (USCOTS), Online. (National)
- Whitacre, I., **Findley, K.**, & Atabas, S. (May, 2021). *Productive seeds in preservice teachers' reasoning about fractions*. Presentation at the 42nd annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA), Online. (International)
- Berens, F. & **Findley, K.** (May, 2021). *New ideas for testing a psychometric instrument using mixed methods*. Presentation at the 76th Annual American Association for Public Opinion Research (AAPOR) Conference, Online. (National)
- 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/TRAININGS TAUGHT

The University of Illinois at Urbana-Champaign

- STAT 420/ASRM 450: Methods of Applied Statistics
 - o *Spring 2021*
- STAT 212: Biostatistics
 - o *Fall 2019, Spring 2020, Fall 2020, Spring 2021, Fall 2021*
- STAT 100: Statistics
 - o *Spring 2020*
- Statistics TA Orientation and Training
 - o *Fall 2020, Fall 2021*

The University of Göttingen

- Methods of Data Collection and their Impact on Data Analysis
 - o *Summer 2021*

Florida State University

- EDF 1005: Introduction to Education
 - o *Fall 2018, Spring 2019*
- ISC 3523: Research Methods
 - o *Fall 2018*
- STA 2122: Introduction to Applied Statistics
 - o *Spring 2017*
- STA 2171: Statistics for Biology
 - o *Fall 2014, Spring 2015*

SUPERVISION OF GRADUATE STUDENT INSTRUCTION

Summer 2021	Cardenas-Torres, E. – STAT 100
Summer 2021	Williams, T. – STAT 100
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

2019-2021 **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

- American Statistical Association (ASA)
 - o ASA Chapter on Statistics and Data Science Education
- Mathematical Association of America (MAA)
 - o Special Interest Group in the Mathematical Association of America (SIGMAA) on Statistics Education (STAT-ED)
 - o Special Interest Group in the Mathematical Association of America (SIGMAA) on Research in Undergraduate Mathematics Education (RUME)
 - o College Mathematics Instructor Development Source (CoMInDS)

SERVICE TO THE UNIVERSITY

The University of Illinois at Urbana-Champaign

2019–Present Committee Chair for **Teaching Assistant Training** – Department of Statistics
 2020–Present Committee Member for **Courses and Curricula**– College of Liberal Arts and Sciences
 2020–Present Committee Member for **Timetable** – Department of Statistics
 2020–2021 Committee Member for **Student Appeals** – Department of Statistics

Florida State University

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

SERVICE TO THE PROFESSION

Project Participation

Sim Design Team Member for “Meet in the Middle” – PhET Sims

Guest Reviewer for Refereed Journals

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

Service to Professional Organizations

Proposal Reviewer – Annual Conference on Research in Undergraduate Mathematics Education
Paper Referee – International Conference on the Teaching of Statistics
Proposal Reviewer – North American Chapter of the International Group for the Psychology of Mathematics Education

SERVICE TO THE COMMUNITY

2021	Judge – 2021 Virtual Undergraduate Research Symposium, University of Illinois
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