

Emily A. Barton

Curriculum Vitae

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Education

Doctor of Philosophy in Curriculum & Instruction, Instructional Technology 2018
University of Virginia

Bachelors of Science in Education, Honors Degree, *Summa Cum Laude* 2012
University of Delaware

Research Experience

Research Assistant Professor 2019 - present
Curry School of Education and Human Development

Post-doctoral Research Associate, Education Technology 2018 - 2019
Curry School of Education and Human Development

Director of Implementation Research and Analysis 2018 - present
Jefferson Education Exchange (JEX)

Responsibilities: Principal or co-principal investigator for all JEX research, conceptualization and management of research designs, grant proposal preparation, survey development, data collection, IRB management, data management and analysis, research team management

Co-principal Investigator 2018 - present
Exploring Design Mindsets and Practices across Instructional Contexts

Responsibilities: Study design and proposal, survey development, quantitative and qualitative analysis, (projected) manuscript author lead

Co-principal Investigator 2015 - 2019
Responsibilities: Study design and proposal, achievement measure and survey development, IRB management, data coding, quantitative and qualitative analysis, manuscript author lead

Graduate Student Research Assistant 2015 - 2018
CANLEAD

Institute for Education Sciences, Goal 2 Development and Innovation, Grant R305A110913
Curry School of Education, University of Virginia

Responsibilities: Quantitative data management, analysis, and presentation; qualitative interview and observation data collection and analysis; grant proposal preparation; video coding management; organization and design of online resources

Graduate Student Research Assistant

MyTeachingPartner-Math/Science

Institute for Education Sciences, Goal 3 Efficacy and Replication, Grant R305A12063

Center for Advanced Studies of Teaching and Learning

Curry School of Education, University of Virginia

Responsibilities: Video coding and team management, undergraduate research assistant management, Remark templates, cleaning and analysis of website server data

Instructional Experience

University of Virginia

Instructional Designer, Administration & Supervision Program 2017 - 2018

Education Leadership, Foundations, & Policy Department, Curry School of Education

- Support translation of in-person courses to online courses
- Work with subject matter experts to design synchronous/ asynchronous classes
- Design formative and summative assessment tasks
- Align instructional technologies to learning goals and objectives
- Oversee hired course facilitators

Co-Instructor (with Dr. Jennifer Chiu) 2016 - 2018

EDIS5070: Designing Technology-Enhanced Solutions to Instructional Problems

- Collaborate with co-instructor and practicing teacher to redesign EDIS3450 into a design-based thinking course
- Design and monitor asynchronous modules with authentic assessment tasks
- Scaffold students through a semester-long design-based thinking task
- Assess student work for technology integration proficiency

Lead Instructor 2014 - 2016

EDIS3450: Teaching with Technology in the Secondary Humanities (3 credits)

- Prepared pre-service teachers to effectively incorporate technology in their practice
- Developed and modified course syllabus
- Aligned course curriculum with state teacher education program regulations
- Designed all assignments and class sessions to meet course goals and objectives

The Pilot School Inc. 2012 - 2014

Upper Division (Grades 6-8) Language Arts Teacher

- Constructed individualized education program for students, selecting curriculum and instructional materials
- Designed and executed lessons to engage students using multiple modes and incorporating technology
- Wrote and administered assessments to evaluate student achievement and progress
- Worked collaboratively with a team to conduct bi-annual conferences and present information about student performance with parents

Grants

Building a National EdTech Implementation Framework

\$1,500,000, Chan Zuckerberg Initiative
2019-2020

Conversations to Elevate Educator Voice, Partnership with Institute of Education Sciences

\$150,000, Chan Zuckerberg Initiative
\$100,000, Bill and Melinda Gates Foundation
2018

Factors Influencing Teacher Construction of a System of Practice for Professional Learning

\$1,000, Curry Doctoral Student Dissertation Innovative, Developmental, Exploratory Award
2016 - 2018

Comparing Face-to-Face and Remote Delivery of Instruction for Delaware Master Gardener Training

\$5198, Delaware Cooperative Extension Assessment Award
2015 - 2016

Publications

Papers

Barton, E. A., & Dexter, S. (in press). Technology integration self-efficacy sources from a holistic system of formal, informal, and independent professional learning. *Educational Technology Research and Development*.

Barton, E.A. & Barton, S. B. (in press). Master Gardener Satisfaction and Intent to Remain After Training via Remote Delivery. *Journal of Extension*.

Whittaker, J. V., Kinzie, M. B., Vitiello, V., Decoster, J., Mulcahy, C., & **Barton, E. A.** (in press). Impacts of an early childhood mathematics and science intervention on teaching practices and child outcomes. *Journal of Research on Education Effectiveness*.

Barton, E. A., & Dexter, S. (2018). Seeing and supporting the system: Leader- and teacher-directed professional learning as a situated holistic system. Manuscript in preparation.

Barton, E. A., Whittaker, J. V., Kinzie, M. B., Decoster, J., & Furnari, E. (2017). Understanding the relationship between teachers' use of online demonstration videos and fidelity of implementation in *MyTeachingPartner-Math/Science*. *Teaching and Teacher Education*, 67, 189–201. doi: 10.1016/j.tate.2017.06.011

Barton, E., **Barton E. A.,** Barton, S., Boyer, C., Brosnan, J., Hill, P., Hoyle, J., Reid, J., Seger, J., & Stafne, E. (2017) Using technology to enhance extension education and outreach. *HortTechnology*, 27, 177-186. doi: 10.21273/HORTTECH03608-16

Barton, E.A., Barton, S. B., & Ilvento, T. (2016) Evaluating the implementation of video web conferencing in Delaware Master Gardener Training. *HortTechnology*, 26, 669-676. doi:10.21273/HORTTECH03225-16

Proceedings

Dexter, S., **Barton, E.***, Anderson Morgan, M. & Meyer, J.P. (2016). Relative uses, impact, and possibilities for teachers' uses of formal, informal, and independent learning to integrate technology. In *Proceedings of Society for Information Technology & Teacher Education International Conference 2016* (pp. 1195-1202). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).

Presentations

*Presenting author

Invited Oral Presentations

Barton, E.A. (2017, July) *Enhancing Cornell Extension education with learner-centered technology*. Workshop presented at the New York State Extension Retreat, Lake Placid, NY.

Barton, E.A. (2016, August) *Technology in Extension: Driving your technology decisions with educational best practice*. Presentation at the annual meeting of the American Society for Horticultural Science, Atlanta, GA.

Oral Presentations

Barton, E.A.* & Epstein, B. (2019, April) *Crowdsourcing Educator Perspectives on First- and Second- Order Variables Impacting EdTech Implementation*. Paper presented at the annual meeting of the American Educational Research Association, Toronto, CA.

Dexter, S., Hull, M., & **Barton, E.A.** (2019, April) *Relationships between Instructional Leadership Practices and Teachers' Instructional Goals, Practices, and Professional Learning*. Paper presented at the annual meeting of the American Educational Research Association, Toronto, CA.

Barton, E.A.* & Barton, S.S (2018, August) *The impact of remote training on program satisfaction and retention intent of Delaware Master Gardeners*. Paper presented at the annual meeting of the American Society for Horticultural Science, Washington, DC.

Budishak, V., **Barton, E.A.**, & Barton, S.S. (2018, August) *Delaware Master Gardeners: A report on volunteer satisfaction, perception of training and retention intent*. Paper presented at the annual meeting of the American Society for Horticultural Science, Washington, DC.

Dexter, S. & **Barton, E.A.** (2018, April) *The Efficacy of An Intervention to Strengthen School Leaders' Instructional Leadership Practice*. Roundtable session presented at the annual meeting of the American Educational Research Association, New York City, NY.

Barton, E.A. & Dexter, S. (2018, April) *Teacher Participation in Leader- and Self-Directed Professional Learning: Contextual Leadership Influences*. Poster session presented at the annual meeting of the American Educational Research Association, New York City, NY.

Barton, E.A.* & Dexter, S. (2017, April) *Teacher systems of practice for technology integration learning: Relationships among formal, informal, and independent learning*. Paper presented at the annual meeting of the American Educational Research Association, San Antonio, TX.

Barton, E.A.*, Barton, S.S., & Ilvento, T. (2016, August) *Ensuring quality: Evaluating the implementation of video web conferencing in Delaware Master Gardener training*. Paper presented at the annual meeting of the American Society for Horticultural Science, Atlanta, GA.

Dexter, S., **Barton, E.A.***, Morgan, M.A., & Meyer, J.P. (2016, March) *Relative uses, impact, and possibilities for teachers' uses of formal, informal, and independent learning to integrate technology*. Curry School of Education: Curriculum, Instruction and Special Education Works in Progress, Charlottesville, VA.

Poster Presentations

Rutter, J., **Barton, E.A.**, Peddie, F., Dion, J. & Chiu, J. (2019, April) *Supporting Preservice Teachers' Technology Integration Through Design Thinking*. Poster session presented at the annual meeting of the American Educational Research Association, Toronto, CA.

Mulcahy, C., **Barton, E.A.**, Whittaker, J.V. & Kinzie, M. (2018, June) *Teacher Perspectives on Adaptations Made in a Math and Science Curricular Intervention*. Poster session presented at the Administration for Children and Families' National Research Conference on Early Childhood, Washington, DC.

Barton, E.A.* & Dexter, S. (2018, April) *Teacher Participation in Leader- and Self-directed Professional Learning: Contextual Leadership Influences*. Poster session presented at the annual meeting of the American Educational Research Association, New York City, NY.

Barton, E.*, Whittaker, J.V., Kinzie, M.B., DeCoster, J., & Furnari, E. (2017, April) *Early childhood teachers' use and perceptions of online demonstration videos as curricular support for fidelity of implementation*. Poster session presented at the annual meeting of the Society for Research in Child Development, Austin, TX.

Barton, E.*, Whittaker, J.V., Kinzie, M.B., DeCoster, J., & Furnari, E. (2016, February) *Understanding the relationship between use of online professional development supports and fidelity of implementation in MyTeachingPartner-Math/Science*. Poster session presented at the annual UVA Curry School of Education Research Conference, Charlottesville, VA.

Service

Summer Undergraduate Research Program, Affiliate Mentor
Assessment Management Committee, Administration & Supervision Representative

Research Interests

Instructional design for adult learning maximizing technology affordances
Development of teacher professional learning through formal, informal, and independent modes
Online and blended professional learning

Honors and Awards

University of Virginia, 2016 Public Days

University of Virginia, Curry School of Education Research Conference 2016 First Place Poster

University of Delaware 2012 School of Education Excellence in Academic Achievement Award

Praxis 2012 Recognition of Excellence

Professional Affiliations

American Educational Research Association

Society for Information Technology and Teacher Education

Kappa Delta Pi, Education Honors Fraternity