

Research in Action Podcast Instructor Guide

Use the following episode description, learning objectives, guiding questions and activity suggestions to more easily include “Research in Action” podcast episodes as a supplemental resource for your course.

Dr. Sam Johnston on Design-based Research [29:32]

Research in Action - Episode 46

Podcast and Episode Information

“Research in Action” is a weekly podcast about topics and issues related to research in higher education featuring experts across a range of disciplines.

On this episode of the podcast, the guest is Dr. Sam Johnston, a research scientist with The Center for Applied Special Technology, or CAST. With support of the Gates Foundation’s Open Professionals Education Network, she recently led the development of UDL On Campus—a collection of online resources to aid postsecondary educators in implementing Universal Design for Learning. Currently, Sam works on the National Center on Accessible Educational Materials (AEM) focusing on postsecondary and workforce take up of AEM. Sam is also a co-principal investigator for a National Science Foundation study on stereotype threat and its impact on inquiry science pedagogy in middle schools. The project will create a prototype web-based professional development course to help middle-school science teachers understand stereotype threat and use UDL to reduce its effects in everyday instruction. Sam’s primary research focus is on the use of networked technology to support peer-to-peer knowledge transfer and she has conducted design-based research in both professional development and formal education settings. Before joining CAST, Sam was a Senior Associate and Distance Educator at the Center for Social Innovation, leading the company’s online learning strategy. Sam holds a BA from McGill University and a masters degree and doctorate in education from Harvard.

Segment One [00:00-10:17] - In this segment, Sam offers a definition of design-based research.

Segment Two [10:18-18:32] - In this segment, Sam shares some examples of designed-based research based on her work with CAST.

Segment Three [18:32-29:32] - In this segment, Sam discusses some of the benefits and challenges of collaborating with vendors on academic research.

Bonus Clip #1 [00:00-04:10]: Basic vs. Applied Research

Bonus Clip #2 [00:00-04:26]: Expanding Design-based Research into Higher Education

Show notes and a transcript for this episode can be found at:

<http://ecampus.oregonstate.edu/research/podcast/e46/>

Learning Outcomes

By listening to this episode, students will be able to:

- Define design-based research
- Provide an example of design-based research
- Discuss an example of a stereotype threat
- Discuss potential benefits and challenges in collaborating with a vendor on research projects
- Cite resources for design-based research
- Explain the difference between basic and applied research

Guiding Questions for Listening

- What is design-based research?
- What does Dr. Johnston mention is an important component of design-based research?
- What does Dr. Johnston explain is the goal of design-based research?
- What is the Agile software development process?
- What is an example of a design-based research project?
- What is stereotype threat?
- According to Dr. Johnston, what important role do vendors bring to research?
- What appear to be some of the challenges in collaborating with vendors in research?
- What is the difference between “basic research” and “applied research”? (See also, Bonus Clip #1)
- According to Dr. Johnston, how might designed-based research be applied to a higher education setting? (See also, Bonus Clip #2)

Possible Activities

- Have students find and read an article where design-based research is included in the methodology for the study. Ask students to share about their articles on a discussion board or in-class and lead a discussion on the range of projects where design-based research can be applicable.
- Ask students to visit the show notes for this episode (<http://ecampus.oregonstate.edu/research/podcast/e46/>) and look at an additional resource that is linked in connection with this episode. Students can write a short review of that resource to share with their peers.
- Ask students to visit the show notes for this episode (<http://ecampus.oregonstate.edu/research/podcast/e46/>) and post an additional resource connected to the content of the episode in the comments section.
- Have students share questions that are raised for them based on the content of this episode. What would they ask Dr. Sam Johnston if they could?

Suggested Citation (APA, 6th edition)

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Notes

About the Research in Action Podcast

“Research in Action” (RIA) is a podcast about topics and issues related to research in higher education featuring experts across a range of disciplines. Episodes are posted weekly and include guest interviews and occasional solo episodes. Guests are from a range of higher education institutions and share their expertise on qualitative, quantitative and mixed methods as well as their personal experiences as researchers, research and writing practices, organizational and productivity strategies, and much more. Some weeks, bonus content will also be posted.

“Research in Action” is hosted by [Dr. Katie Linder](#), research director for Oregon State University Ecampus.

Visit the podcast website to view [show notes and transcripts for each episode](#), explore our [episode guide](#), learn more about how to [contact us](#), or [suggest a future guest or topic](#).

You may subscribe to the [“Research in Action” RSS feed](#) or access the podcast via [iTunes](#), [Soundcloud](#) or [Stitcher](#).

“Research in Action” is also listed on [MERLOT](#).

The “Research in Action” podcast is a resource funded by Oregon State University Ecampus – ranked top ten in the nation for online education two years running by U.S. News & World Report. OSU Ecampus has more than 45 degree programs and more than 1,000 classes online.

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