

LRA: Research to Practice Show Notes

Episode 006 - Formative Research

April 8, 2014 8 to 9 PM (EST)

How should research inform practice and how should practice inform research? Educational research has too often been perceived as detached from the daily complexities of teaching and learning in schools. Formative research experiments offer one path forward. As David Reinking argues, “The aim is to generate recommendations, not prescriptions, and pedagogical principles (humble theories) useful to practitioners, thus closing the gap between research and practice.” This LRA Research to Practice show explores the specific affordances and complexities of designed-based research in order to engender further partnerships between practitioners and researchers as they collectively pursue authentic solutions to challenges in specific educational contexts.

Hangout location for this show: www.youtube.com/user/LiteracyResearch/live

Website for this episode:

<https://sites.google.com/site/textsandtools/online-information/lrar2p/episode-006---formative-design>

Short URL for this doc: <http://goo.gl/I7GzZm>

[#Literacies Blog:](#)

<http://literacieschat.wordpress.com/2014/03/28/april-literacies-and-lra-research-to-practice/>

All episodes of LRA: Research to Practice will be broadcast using a Google Hangout on Air. Please plan on joining the episode 20 minutes early so we can get settled.

Participants:

Please add your name / Twitter handle / email address/Google+ address. We're glad you're here!

Panelists:

- [David Reinking](#)
 - [Emeritus Professor-Language and Literacy](#)

- Clemson University
- REINKIN@clemson.edu
- *Research Interests:*
 - Literacy
 - Differences between digital and printed texts
 - Developing digital literacy
 - Research methods: Design-based research
 - Professional development of teachers
- Thoughts on Formative Research:
 - “Formative experiments replace the metaphors of the laboratory and the lens with ecology and engineering. They seek deep pedagogical understanding informed by iterative, data-driven modifications of a promising intervention aimed at achieving a valued pedagogical goal in authentic instructional contexts. The aim is to generate recommendations, not prescriptions, and pedagogical principles (humble theories) useful to practitioners, thus closing the gap between research and practice. This approach challenges the reductionism of conventional experiments and the observational passivity of naturalistic approaches.”
- *Resources to Share:*
 - Reinking, D. (2011). Beyond the laboratory and lens: New metaphors for literacy research. In P. L. Dunston, L. B. Gambrell, S. K. Fullerton, P. M. Stecker, V. R. Gillis, & C. C. Bates (Eds.), *60th Yearbook of the Literacy Research Association* (pp. 1-17). Oak Creek, WI: Literacy Research Association.
 - [Reinking, D., & Bradley, B.A. \(2008\). *On formative and design experiments*. New York: Teachers College Press.](#)
 - Bradley, B. A., & Reinking, D. (2011). Revisiting the connection between research and practice using design research and formative experiments. In N. Duke & M. Mallette (Eds.), *Literacy research methodologies*, 2nd Edition (pp. 188-212) New York: Guilford Press.
 - Bradley, B., Reinking, D., Colwell, J., Hall, L., Fisher, D., Fey, N., & Baumann, J. (2012). Clarifying formative experiments in literacy research. In P. J. Dunston, S. K. Fullerton, C. C., Bates, K. Headley, P. M. Stecker (Eds.) *61st Yearbook of the Literacy Research Association* (pp. 185-195), Oak Creek, WI: Literacy Research Association.
- Marc Nachowitz, Ph.D.
 - [Assistant Professor-Teacher Education](#)
 - Miami University
 - nachowm@miamioh.edu
 - *Research Interests:*

- Adolescent literacy
 - Reading for Deep Understanding
 - Reading and Writing to Support Content Learning
 - Design-based research
- *Thoughts on Formative Experiments:*
 - “Innovation involves continuous design, implementation and redesign until an ideal product is achieved. As an interventionist, I am most concerned with testing emerging pedagogical theories situated in the real world of classroom practice. Formative experiments allow for the “tweaking” of instructional strategies to achieve the experiment’s stated pedagogical goal—a methodological freedom not found in experimental or quasi-experimental research.”
- *Resources to Share:*
 - Applebee, A., Langer, J., Wilcox, K. C., Nachowitz, M., Mastroianni, M., & Dawson, C. (2013). *Writing Instruction that Works; Proven Methods for Middle and High School Classrooms*. New York: Teachers College Press.
 - Nachowitz, Marc & Brumer, Nancy (in press). “Teaching the Talk, not the Text.” *Voices from the Middle* (slated for October 2014 issue.)
- Jamie Colwell, Ph.D.
 - [Assistant Professor-Literacy](#)
 - Old Dominion University
 - jcolwell@odu.edu
 - Twitter: JamieRColwell
 - Research Interests:
 - Dr. Colwell's research focuses on adolescent and disciplinary literacy, integrating disciplinary literacy into teacher education, bridging the gap between adolescents’ in-and out-of-school literacies using digital and Internet technology, the use of online discussion platforms to promote adolescents’ critical thinking, and qualitative and design-based research, particularly utilizing formative experiments to refine interventions.
 - Thoughts on Formative Research:
 - “Formative design methods have the potential to transform literacy research by forging direct and ongoing connections between research and practice through collaboration with teachers and consideration of how teachers and researchers can collectively meet educational goals important to improving literacy in various classroom contexts.”
 - Resources to Share:
 - Colwell, J., Hunt-Barron, S., & Reinking, D. (2013). *Obstacles to*

developing digital literacy on the Internet in middle-school science instruction. *Journal of Literacy Research*, 45(3). 295-324.

- [Colwell, J., & Reinking, D. \(2013\). Integrating disciplinary literacy into middle-school and pre-service teacher education. In N. Nieveen & T. Plomp \(Eds.\), *Educational Design Research – Part B: Introduction and Illustrative Cases* \(pp. 469-480\) Enschede, the Netherlands: SLO.](#)

- Sarah

- Assistant Professor of Education
- Converse College
- sarah.hunt-barron@converse.edu
- Research Interests
 - My research interests include using digital technology in writing and literacy and the development of teachers of writing. I've recently been working on a large project through the National Writing Project focused on working with writing teachers in rural middle and high schools. I primarily conduct research with middle and high school teachers and students.
- Thoughts on Formative Design
 - Formative design makes sense for classrooms. I see it as a bridge between research and practice, where teachers and researchers form real and lasting partnerships. Together, teachers and researchers implement a promising intervention in a classroom and make thoughtful and meaningful adjustments to maximize student learning, documenting the entire process. As a teacher, participating in this type of research gave me the opportunity to work toward solving challenging pedagogical issues in my classroom with collaborators who were experts in the field; it was fantastic professional development for me. As a researcher, I get to see what happens when a promising practice is put into action in a particular context. Everyone wins - students, teachers, and researchers.
- Resources
 - Colwell, J., Hunt-Barron, S., & Reinking D. (2013). Obstacles to developing digital literacy on the Internet in middle-school science instruction. *Journal of Literacy Research*, (45)3. doi: 10.1177/1086296X13493273
 - Hunt-Barron, S. & Colwell, J (2013). Illuminating change: Technology, feedback, and revision in writing. In K.E. Pytash and R.E. Ferdig (Eds), *Exploring Technology for Writing and Writing Instruction* (135-151). Hershey, PA: IGI Global.doi:10.4018/978-1-4666-4341-3
 - Hunt-Barron, S. & Puffer, I. (2012). Engaging middle school students through online collaboration. *South Carolina Middle School Association Journal*, 5.

Host:

- Kristy Pytash, Ph.D.
 - Assistant Professor-Literacy Education
 - Kent State University
 - kpytash@kent.edu
 - Twitter: #kpytash

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Below is a suggested plan for the episode. Please use this document for laying out topics, and points you would like to discuss. You may add a thought or question to the “Prodding Questions” section at the bottom of this document.

Please consider adding your initials if you have a specific comment that you would like addressed.

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Segment One - Framing, Defining, and Contextualizing

This area includes the major materials, links, and individuals presenting/discussing these topics. Please feel free add materials below.

- Dr. Reinking’s LRA Presidential address referenced Karl Hostetler’s (2005) “What is Good Education Research?” Why do you believe designed-based research is not only methodologically sound, but also ethically sound?
- There are various metaphors used to describe formative and design experiments. Why is describing formative research in terms of engineering helpful in understanding this methodology?

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Segment Two - What’s happening in research?

Research Resources. This area includes the research discussed in the episode...and other research from the field. Please feel free add materials below.

- Can you each talk a little about the research you have done using formative and design experiments and explain your experiences with this methodology? What has been promising and what has been challenging?
 - What does the term "rigor" mean in relation to formative and design experiments?
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Segment Three - What should I be doing in my classroom?

Teacher Resources. This area includes instructional materials discussed in the episode...and other helpful guidance. Please feel free add materials below.

- What are the roles of researchers and teachers in formative and design experiments?
- What suggestions or advice would you give researchers and teachers interested in working together during a formative and design experiment?

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****Prodding Questions****

For everyone to consider, which we may bring up during the conversation (please feel free to add to this list. Please use a different color, or add your initials to distinguish your contributions).

How does this “engineering model of research” espoused in formative design inform other methods to teach all (adults and children) learners? This would include new PD models for teachers, content for students, etc. (IO)

How should this inform action research, or classroom research by practicing teachers? (IO)

Research aside....As a teacher, what is the difference between being a healthy reflective practitioner, and bringing in an engineering model of education? (IO)

Should we be infusing this into teacher pre-service programs, or PD models? (IO)

What is the future potential of formative research experiments? (LPH)