

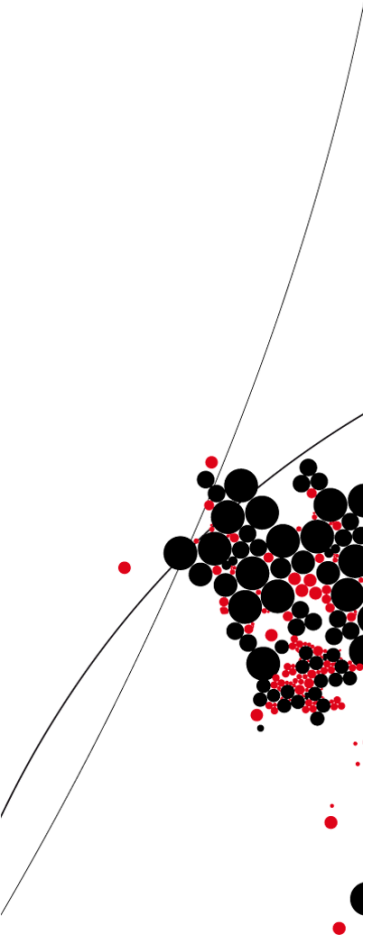
Methods, Goals & Educational Design Research

*Invited presentation during EAPRIL conference
November 26-29, 2013, Biel/Bienne, Switzerland*

Susan McKenney

Open University & Twente University

UNIVERSITY OF TWENTE.



Position statement

Though specific research contexts offer both opportunities and constraints, the methodology of any kind of research (practice-oriented or otherwise) should be determined *primarily by its goals.*



What is educational design research?



“...a genre of research in which the iterative development of **solutions** to practical and complex educational **problems** also provides the context for **empirical investigation**, which yields **theoretical understanding** that can inform the work of others.”

- *McKenney & Reeves, 2012*

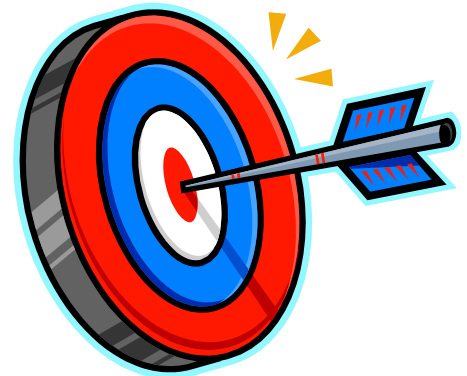
Goals of Educational Design Research

Sine qua non:

- Solutions to real and complex problems
 - Programs, processes, products, policies
- Theoretical understanding
 - Describe, explain, predict, prescribe

Often also:

- Professional development
 - Respondents, researchers, facilitators



Quality EDR must:



- Yields interventions that:
 - Address real and complex problems within given context;
 - Are effective and practical; and preferably also
 - Internally consistent and based on state-of-the-art scientific understanding
- Yields theoretical understanding that:
 - Helps describe, explain, predict and/or prescribe (how to achieve) specific phenomena
 - Is credible and justifiable; and
 - Constitutes a contribution to new knowledge (e.g. by challenging dominant thinking, or breaking new ground)

Quality EDR may also:

- Yield professional development
 - Of those involved, such as:
 - Researchers,
 - Practitioners, and/or
 - Facilitators
 - As indicated by
 - Changes in knowledge, skills and/or attitudes
 - Experimentation/use of new insights in daily practice
 - Improved task performance







Kurt J. Lesker

Resources ↔ Goal Pursuit

- Human
 - Expertise
 - Energy
 - Opportunity
- Material
 - Tools
 - Workspace
- Facilitating
 - Time
 - Funding



Paradigms ↔ Goal Pursuit



- Ontologies

- Differing views of reality yield differing areas of focus
- One true reality?
 - Seeks consensus (e.g. inter-rater reliability)
- Multiple realities? High value on subjective impressions
 - Seeks multiple interpretations (e.g. and tries to describe them well)

- Epistemologies

- Different views on knowledge have implications for how it is sought
 - Researcher, participant and topic are independent?
 - Dualism, objectivism (e.g. reduce biases)
- Researcher, participant and topic are dependent?
 - Deeper insight through intense interaction (e.g. undercover agent)

Methods ↔ Goal Pursuit

- Different kinds of research questions can be answered with different kinds of instruments/data
- Different kinds of findings make different kinds of contributions to theoretical understanding
- In EDR, we often ask things like:
 - Are effects present?
 - Often, but not always involves quantitative data
 - How and why are effects (not) present?
 - Often, but not always, involves qualitative data



Take-home ideas

- The standards to be adhered to must be set in accordance with each goal of the initiative.
- The resources, paradigms and methods present powerfully influence how those standards are adhered to.
- EDR can accommodate multiple ontologies, epistemologies and methodologies.
- Researchers often find it difficult to value investigations departing from ontologies, epistemologies and methodologies differing from their own.



Position statement

Though specific research contexts offer both opportunities and constraints, the methodology of any kind of research (practice-oriented or otherwise) should be determined *primarily by its goals.*

Thank you!
For discussion beyond today...

Susan McKenney

www.EducationalDesignResearch.org

susan.mckenney@ou.nl

susan.mckenney@utwente.nl

UNIVERSITY OF TWENTE.

