# A portrait of evaluation studies of learning technology innovations 2005-2010: Addressing the elephant in the room

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# Describing the elephant

# Looking back



- Evaluating learning technologies

  - Theoretical and methodological challenges (Brown 1992)
  - Questioning the research questions (Reeves 1995)
  - A radical reappraisal (Mitchell 2000)
  - Educational design research (van den Akker et al 2006)

- Issues from the past yet to be addressed?

# Methodology

- Two leading learning technology journals 2005 – 2010 (n = 318 articles)
- Initial selection, research conducted:
  - to evaluate technology-related educational resources, learning designs or the use of technology to solve an educational problem
  - includes collection and analysis of data
  - in a higher education context
- 100 articles selected for in-depth review against thirteen criteria

# Focus for this paper

- The findings discussed here are based on three of our criteria:
  - Is theoretical grounding of the educational design concept described?
  - Did the evidence clearly show the impact of the initiative on student learning and teacher behaviours?
  - Were the findings informative for the study and possibly for other [higher education] contexts?

# Theoretical grounding of design
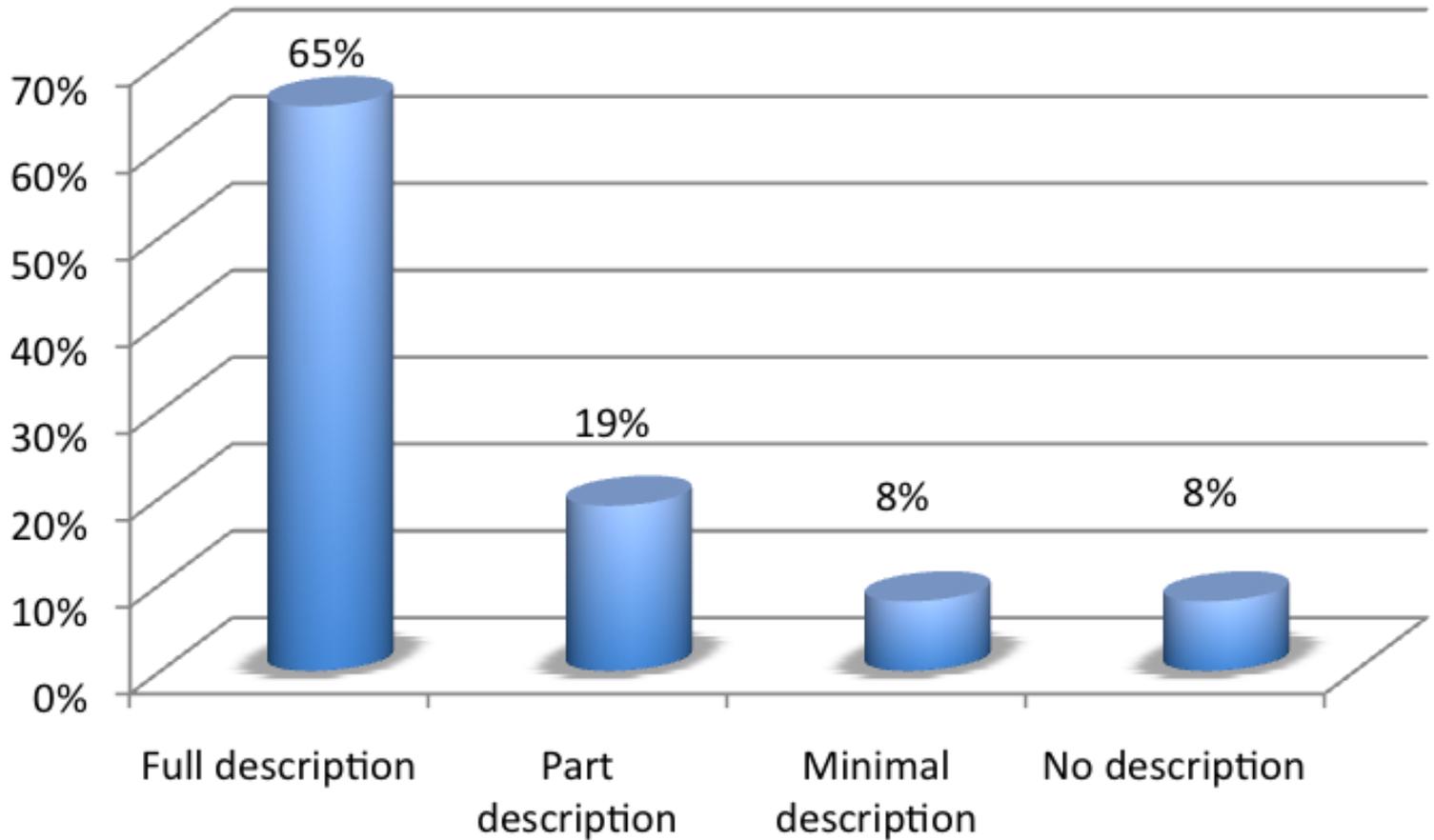
# Evidence of impact
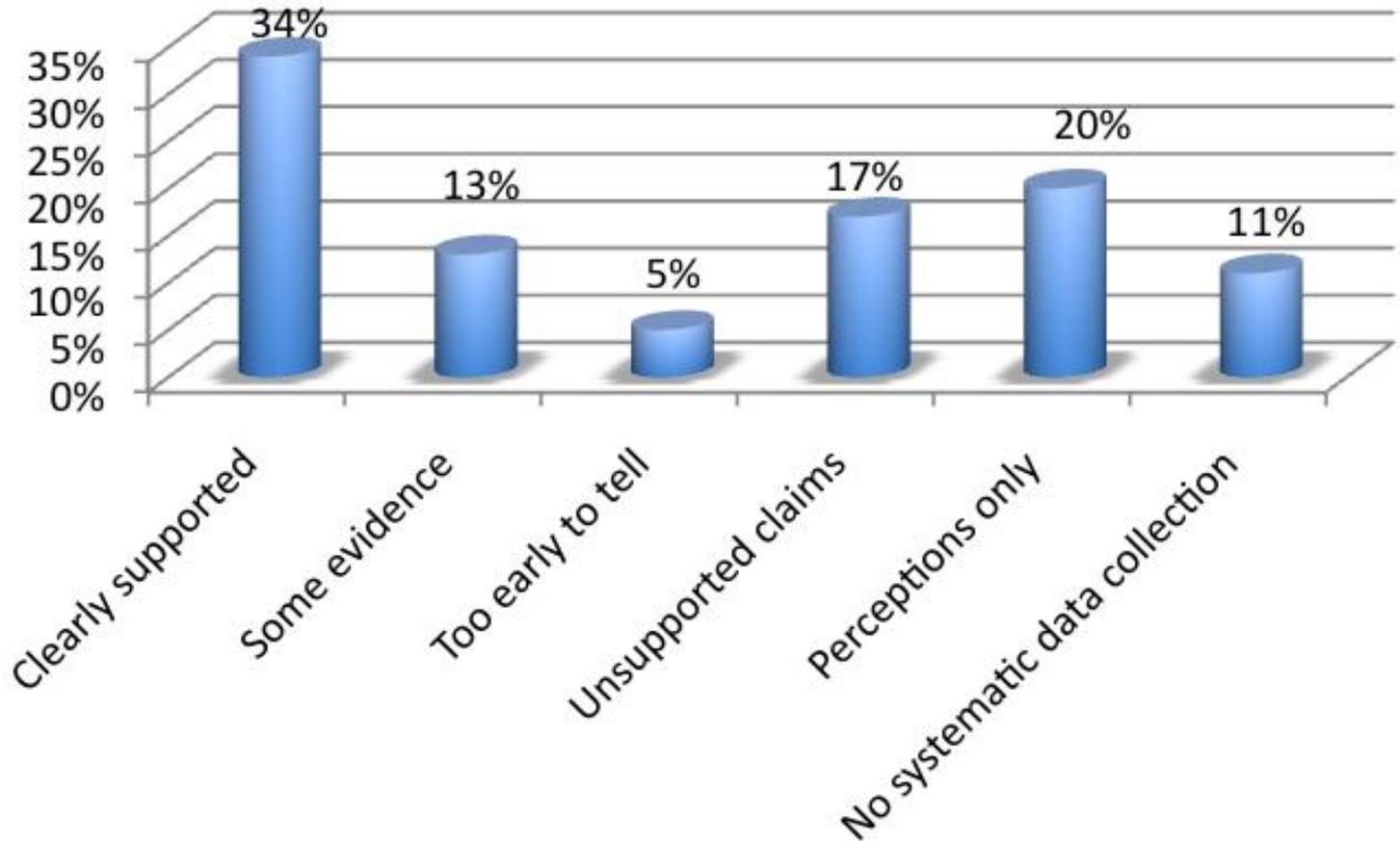
# Potential to generalize findings
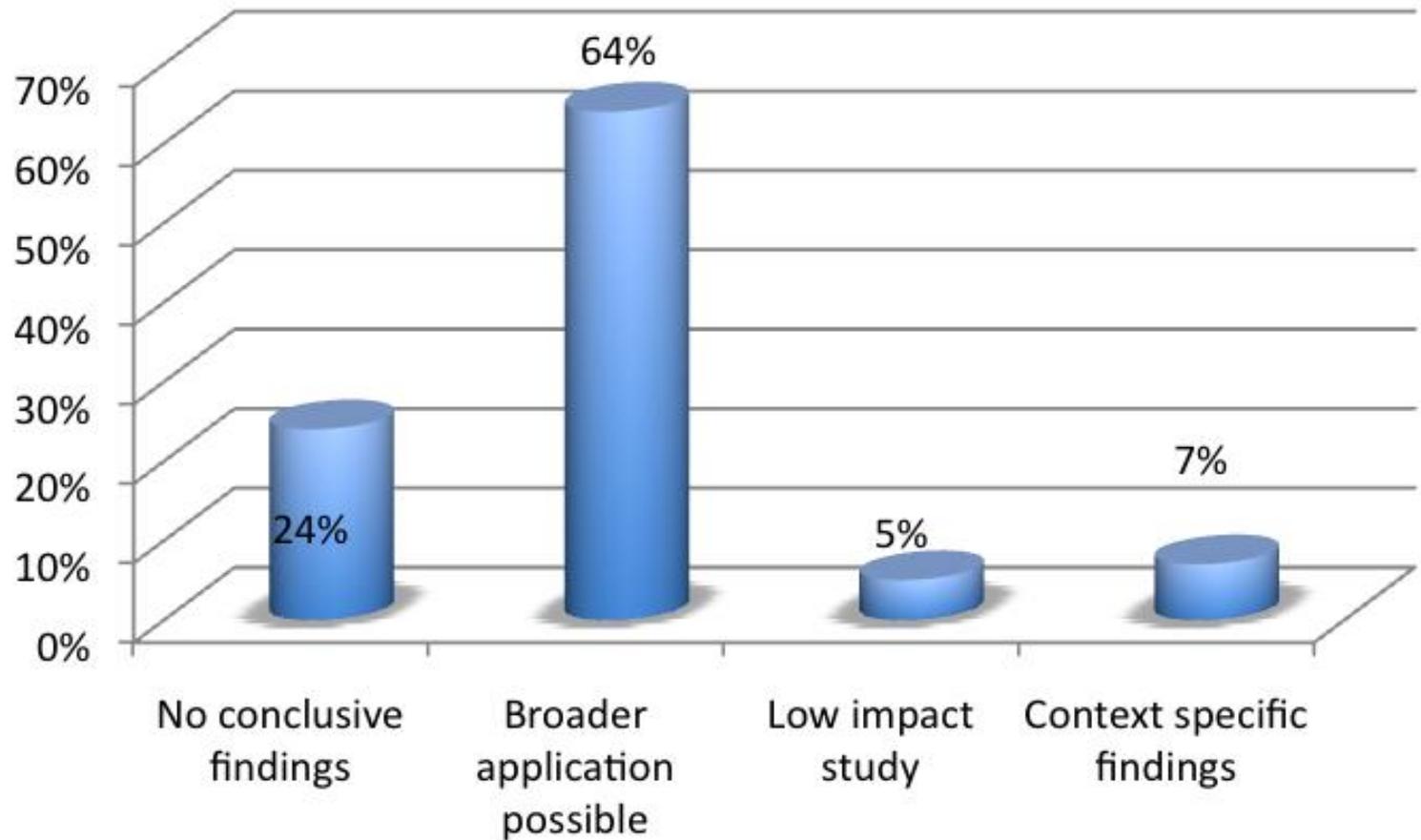
# Moving toward the future

- Our recommendations

- Your feedback and comments
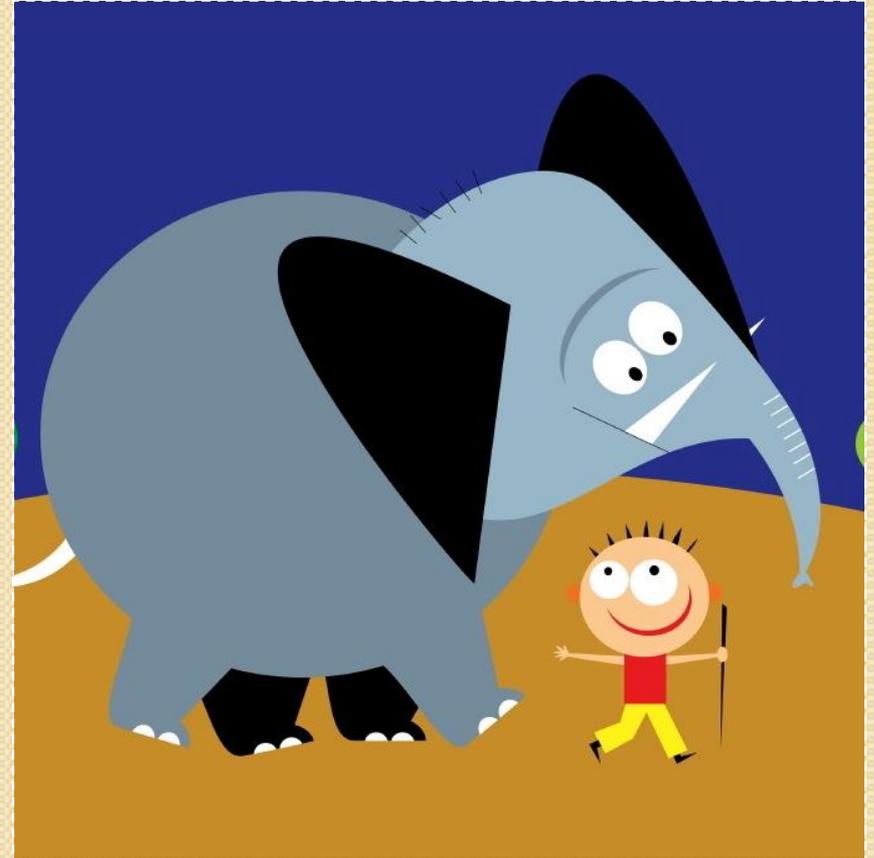
# Thank you

Forthcoming article: Gunn, C & Steel, C. (2012 in press) Repositioning Theory in Learning Technology Research, *Research in Learning Technology 20(2)* – or sooner online
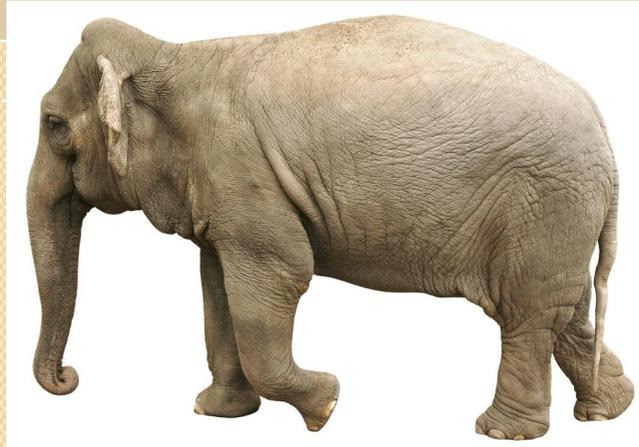
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# 13 criteria

1. What educational problem or issue does the design/innovation attempt to address?
2. Is the purpose of the evaluation to test or improve design of learning resources, a learning design or a technology solution?
3. Is theoretical grounding of the educational design concept described?
4. Does the evaluation use an appropriate methodology, and is it rigorously applied?
5. Was evidence collected systematically from different sources and using different methods throughout the implementation of the elearning initiative?  If not, [how] does this affect the scope of the findings?
6. Are the limitations of methods used e.g. self-report or sole use of objective or subjective data noted in the paper?
7. Was the context of implementation acknowledged in the evaluation design?
8. Did the evidence clearly show the impact of the initiative on student learning and teacher behaviours?
9. To what extent was the study longitudinal and what stage of development or implementation was in focus?
10. What were the outcomes of the study?
11. Were the findings informative for the study and possibly for other [higher education] contexts?
12. Is this case an exemplar of any kind, and why or why not?
13. Other observations