Story-based Learning: The Impact of Narrative on Learning Experiences and Outcomes (S.W. McQuiggan et al. 2008)

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Key Paper Content

Condition n=179							
Holdout n=29		Narrative n = 60		Min-narrative n=56		PowerPoint n = 33	
Female n=18	Male n=11	Female n = 30		Female n = 24		Female n=16	Male n=17

- Narrative-centered Learning Environments (NLEs) and their implications
- Experiment an empirical study conducted with eighth-grade middle school students (with background in microbiology) interacting with an "early generation" NLE,

CRYSTAL ISLAND

- Method
 - 4 groups Narrative, Minimal-narrative, Powerpoint, Hold out (control)
 - 50 minutes of intervention
 - Evaluation comparing pre-test and post-test scores
 - Questionnaires on "Presence" and "Self-efficacy"
- Results
 - Learning outcomes (highest to lowest) Powerpoint, Minimal-narrative,
 Narrative
 - Narrative had a significant effect on student "presence"
- Discussion of outcomes

Overall Decision -- Weak Accept

Pros

- Clearly stated research objective at the beginning of the paper
- Well-designed study with multiple, unique groups
- Well-chosen metrics for evaluation
- Acknowledged limitations and potential improvements such as:
 - Using a longer-term study
 - Investigating narrative factors that contribute to motivation and self-efficacy

Cons

- Poorly executed experiment
 - Control group did not receive a post-test on content knowledge
 - Time pressure
- Conclusions drawn in respect to "presence" more so than "learning outcomes"
 - Line between research objectives and what was found in addition to that is not clear