# Crystal Island

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Story-Based Learning: The Impact of Narrative on Learning Experiences and Outcomes

- NLE = Narrative-centred learning environment e.g. military training game
- Aimed to conduct an **empirical** investigation into learning
- Also considered **motivational benefits** e.g. self-efficacy, presence, interest and perception of control
- Crystal Island: Narrative-centred learning environment (NLE) based around a **scientific investigation** on an island
- 88 F and 91 M participants split into 4 groups: **Holdout (control), Narrative, Minimal-narrative, Powerpoint**
- Procedure: **Pre-test** (6 surveys including curriculum test), **50 minute gameplay**, **Post-test** (5 surveys including the same curriculum test)
- Results: See graph
- Narrative condition had **better presence**, and self-efficacy, interest, presence and immersion are **correlated**
- Discussion: Narrative version may have too much **cognitive load**, future work needs to address **longitudinal** effect on learning, **mastery vs performance focused** students

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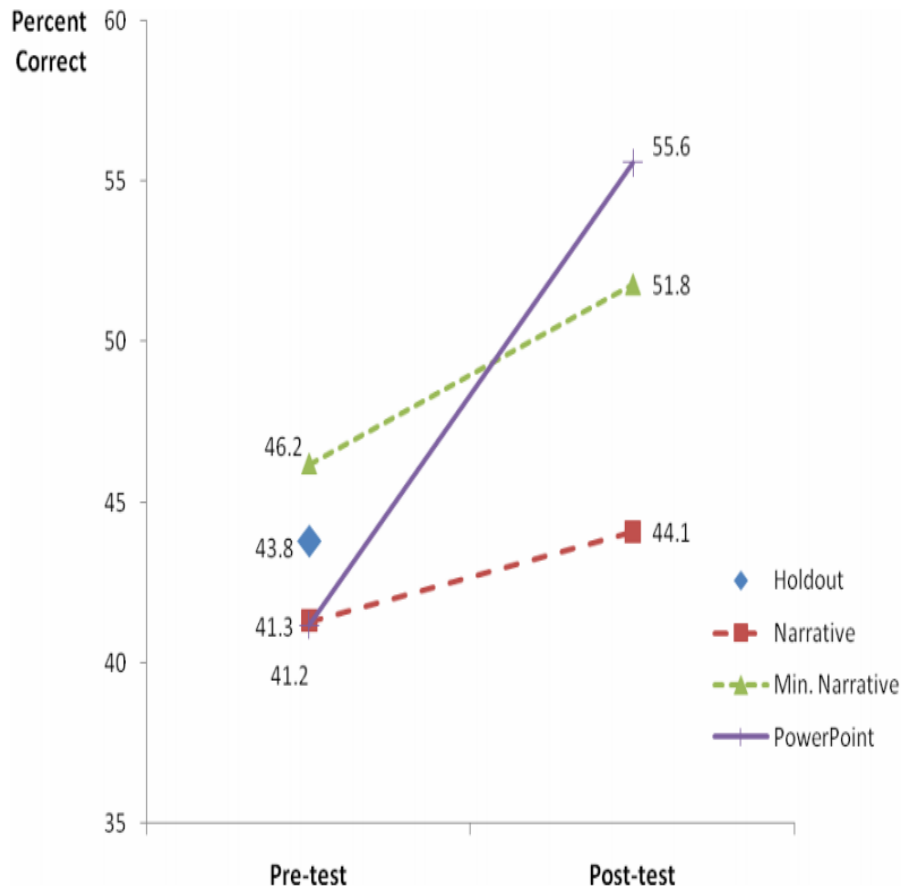
Our decision: Weak Accept

+ Clearly written

+ Succinct

+ A good introduction to the field of NLEs

+ Empirical approach

+ Considers the various ways to assess ALEs

+ Highlights some relevant issues

- Lacks descriptions of and justifications for test materials

- Missing all the results data

- Discussion section could be more detailed

- Lacks screenshots and visual aids

Other comments

- Methodology flaw was only briefly mentioned at the end of the paper
- Empirical assessment was limited to learning gain, not motivational aspects
- Some language was confusing e.g. "somewhat significant"
- Appendix lacked link to game