Can treating students like experts, and giving them practice making holistic comparisons, improve their learning
Analytic vs. Comparative Grading - Example
"Which answer has the better critical idea?"
"Which answer is more effectively articulated?"
“Which is the better proof?”
Algorithmic Comparative Judgment Recap

- Students complete task
- Reviewers complete pairwise judgments
- Algorithm optimizes pairings
- Scaled distribution obtained
ACJ Use Cases

- Reliability and Validity
- Efficiency
- Learning (?)

Icons © Gregor Cresnar (learning), Delwar Hossain (efficiency), and Vladimir Belochin (reliability) from Noun Project
Additional Information
Our Questions

1. Can ACJ be used to improve students’ understanding and appreciation of the subtleties of holistic tasks?

2. What is the best way to incorporate feedback (with or instead of rankings) into the ACJ process?

3. What do students need to enable them to act like experts and complete comparisons?
Tools: No More Marking

https://www.nomoremarking.com/

Fee for service (Great Britain) – judging rather than marking, provides student responses to judges.
Tools - DigitalAssess

http://digitalassess.com/

Original CJ system
Used for judging, portfolio option (Great Britain)

Appears to be no longer a viable company – no response when contacted through multiple channels

Image © http://digitalassess.com/
Tools - ComPAIR

http://ubc.github.io/compair

Peer rating of pair of responses, feedback is a key feature; open source tool
Waterloo’s Pilot - Science Example

SCI 207: Life, the Universe and Everything
Richard Epp, Physics

- 75 students
- Multiple short writing assignments; students will assess multiple pairs
- Evaluate quality of student feedback and self reflection
- Ranking function will be explored – potentially binning?
- Gather student, TA and instructor feedback
THANK YOU!