Adaptive Comparative Judgement:
A Mechanism to Enrich and Enhance Assessment Practices to Support Teaching and Learning

Jeffrey Buckley1, Andrew Doyle1, Eva Hartell1, Niall Seery1,2, and Donal Canty3

1KTH Royal Institute of Technology, Stockholm, Sweden
2Athlone Institute of Technology, Co. Westmeath, Ireland
3University of Limerick, Limerick, Ireland

Lärarnas forskarkonferens, 31 okt 2017

#LFKsthlm
@jeffbuckley92
@donalcanty
@Andrew92d
@EvaHartell
@Niaseery
Develop education where it matters the most. teaching and learning UNDERVISNING in the context of technology education

The Concept of ACJ
Assessment Example

Assessment Example
Assessment Example

Which one is "better"?

Adaptive Comparative Judgement
Probability and Parameter Values

"Worse"  

A  

"Better"

A judgement is made that B is better than A
Probability and Parameter Values

"Worse"  "Better"

A  B  C

A second judgement is made that C is better than B

Therefore, it is probable that C would be better than A
More judgements = More confidence
The Creation of an ACJ Rank
The Creation of an ACJ Rank

LFK OCT 17

The Creation of an ACJ Rank

LFK OCT 17
Parameter Values

Sample ACJ Rank
Exposure to a Broad Range of Work

Portfolios

Judges (e.g. Teacher or Student)

Exposure: Understanding Standards

Student
Feedback from Multiple Sources

ACJ in the Classroom
Case Study 1: Sweden
Case 1 What criteria for success?


[1] Context Flobot’s Friend

Flobot’s Friend

Robot is so busy helping lots of children with their learning. Flobot needs a friend to help you around your own house.

In this task, we are going to design a friend for Flobot. This friend will help you with all the things you need to do.

A proven task fr UK
Task was also validated by teacher in Sweden
[1] Context

[1] Nature of data

Students collected evidence of learning using iPads.
[1] Method

A or B?

I choose B, because ...

ACJ + Think-aloud-protocols

[1] Outcomes 1 (93.2)

What criteria for success were these teachers looking for?

Three strands

Consensus within this group of educated teachers

Whole-
“Red thread” (narrative/story) but also finish the task

Particular

Other – “it felt better”

Highlights importance of

Valid tasks as well as time and opportunity to learn is needed.

Must not leave pupils in their own unreflective “doing/making”, which is fairly common according to Swedish School Inspectorate
[1] Outcome 2

What did the teachers think of ACJ

1. Fun! A bit insecure in the beginning, but I felt more confident after a short while.

2. It was amusing/fun and I learnt a lot. It is easier to assess this way. Compare two at a time.

3. I like the idea that we are more who co-assess

4. Interesting. Different.

5. Fun!! But tiny internet connection problems…

6. This was really interesting! Took a while to see and understand what I was supposed to look for. Purpose got more explicit on what qualities I were looking for.

7. Nice to see other than my own students’ work

8. “I found the assessment work through the portal gave me the strength to see students’ work in a new way.”

ACJ in the Classroom
Case Study 2: Ireland
[4] Focus

The animal kingdom demonstrates many wonderful ways in which animals evolve and adapt to their environment. Observing animals in these environments often reveals how this adaptation has not just happened by chance.

Design a bird feeder to explore the intelligence of birds

DALTA Project: University of Limerick
Funded by Irish Research Council


1. What are your first thoughts and ideas?
2. What is important for this project design?
3. Make a list of things you think you need to find out...
4. How will you do this?
5. Model your ideas to help
6. What did you learn from modeling your design?

Interaction of Mind and Hand
Adapted from Kenbaal et al. 1991
[4] Nature of data

• Voice and video files are most important to understand one another's 'thinking'

• Feedback perspective - more comfortable on an online platform due to the level of anonymity afforded to them as an adjudicator.

• Summative adjudicated
  • Frustrated in seeing peer feedback once the learning activity (2 weeks) had been completed
  • More authentic feedback provided
  • Greater understanding of how they performed relative to their peers

• Students knew where they wanted 'to go' next
Future Possibilities and Agendas

- Summative and Formative Assessment purposes
- Ipsative Assessment
- Expertise in Assessment
- Collective Understandings
- Self-Efficacy
- National Standards and Solid State Ranks
- Relative Performance Between "Classrooms"
- Making Tacit Criteria Explicit

ACJ
Conclusion

Sharing National Standards (Remote)

Technology Enhanced (Video, picture etc.)

Individual Assessment Literacy

Thank you! To be continued

Jeffrey Buckley
jbuckley@kth.se

Andrew Doyle
adoyle@kth.se

Dr Eva Hartell
ehartell@kth.se

Dr Niall Seery
niall@kth.se

Dr Donal Canty
donal.canty@ul.ie

@jeffbuckley92
@Andrew92d
@EvaHartell
@Niaseery
@donalcanty
References