

# Moderated peer assessment of individual contribution in group work

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#### Project need

- ➤ Group work is very common in Engineering
  - Why? Practical and educational reasons
- ➤ Concerns with group work
  - Often the group mark does not reflect the individual contributions
  - Students satisfaction and experience can be damaged by:
    - 'passengers' have not penalties





#### Assessment of group work

- ➤ All students get the **group mark** irrespective of their individual contribution.
- > Students are **assessed individually** based on individual pieces of work.
- > Students' marks are moderated according to level of contribution (tutor or peer-assessed).
- > Others
- **→** Combinations



#### **Our Aim**

Identify and evaluate various methods and elearning systems that would aid us to introduce an element of **peer-assessed 'level of contribution'** into the group assessment and run this practice efficiently even for large numbers of students".



#### Our approach

- ➤ We took a step backwards and asked:
  - Examples of group work takes place in the Engineering Faculty?
  - How is it assessed?
  - Student and staff views?

This would help us to identify the real need and find a more relevant and informed solution.



#### Focus groups with staff

- > Staff who have implemented peer assessment vocal about it's advantages:
  - Less complaints about group dynamics.
  - Higher student satisfaction from giving students control over (a small proportion) of their marks.
  - Tutor moderation keeps the system robust.
- Only major drawback is most current systems are pen and paper, as current e-learning tools are inadequate.

"There is a cost to it, because there is an extra processing step, so careful data entry is needed. It would be nice if it got set up and interconnected with moodle and things like that, yeah that would be the killer for us."



#### Focus groups with students

➤ Bad experience in group work due to "passengers"

"About 3 out of 10 did the work, and others just don't care."

"I hate group work. When I've finished my work and I see the message saying 'I can't make the meeting' I hate it."

Element of individual contribution needed, possibly set by peers "I like to have control over the work so an individual part is always good, but marking others contributions would also help."

"I just don't want to have to [rely on] fortune if we can't pick the group, where I will get the same mark as someone else and I don't know how much they are gonna work."

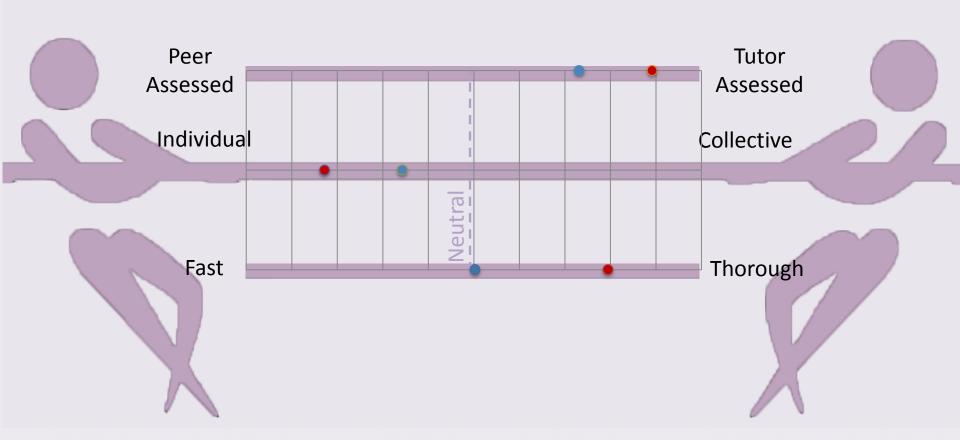


#### Qualities in assessment

N = 35

5% Project

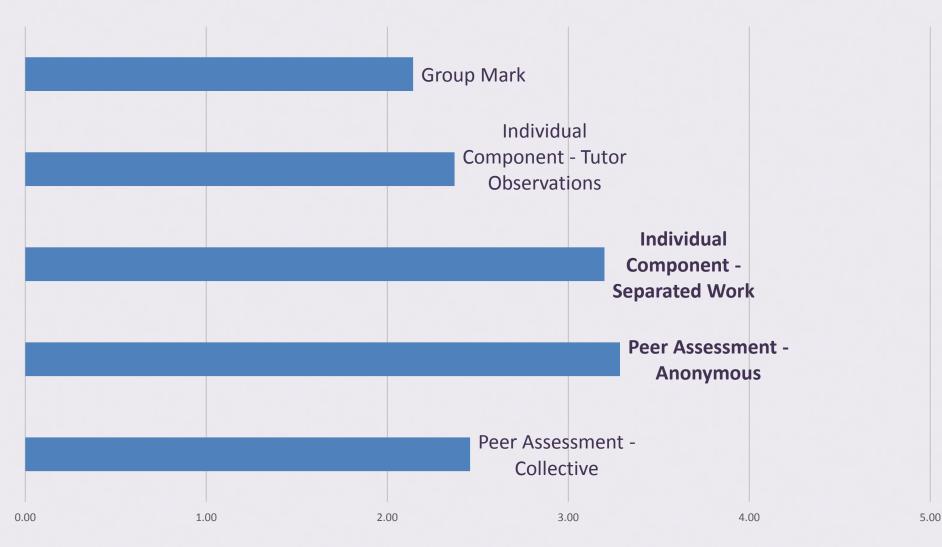
• 50% Project





### Methods of group assessment







#### Thoughts on peer assessment

> Level of contribution assessed by peer

"This method is more fair because it takes into account everyone's opinions."

"I think you always do need at least a tiny element of marking each other because only within the group [...] [is] the best people to know who's done what."

Moderation needed and rules to be established

"What if person A doesn't do any of the work, yes they will not get a good mark, but they will not know who did the most work."

"I think it would work very well in smaller groups, but in larger groups I would say you were necessarily not aware of how well everyone is performing."



# Peer assessment of contribution level: Tools criteria

- ➤ Online → practical and suitable for large classes
- ➤ Anonymous
- ➤ Within Moodle (preferable) → more staff and student friendly, no problems with data protection, ...
- ➤ Flexible → Different staff might want to ask/value different aspects.



#### Our conclusions/recommendations (I)

- > Students want to have an individual *contribution* factor embedded into the marking of group work
- Some prefer tutor to set up this *contribution* factor, but are happy also with peer-assessment.
- Some students prefer peers to assess the contribution factor as they are more aware of the group dynamics.

### **L**

#### Our conclusions/recommendations (II)

- An element of *peer-assessed contribution level* should always be included in the assessment of group work.
  - Easy to incorporate and improves students' experience

- The contribution factor can be used by tutor in different ways (very flexible). E.g.:
  - Individual mark = group mark \* contribution factor
  - Individual mark = group mark + contribution factor



#### Further work

- > Continue investigating student and staff views
- ➤ Identify *suitable* tools for peer-assessment of *contribution level* with the discussed criteria
- ➤ Identify rules to flag cases needing moderation (in collaboration with students and staff)



#### Do you want to know further?

> Contact us:

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## Thanks