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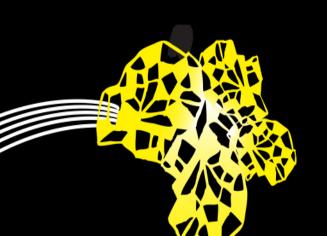
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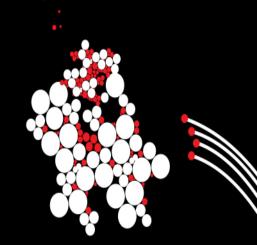
SURF PROJECT GROUP-PEER-FEEDBACK

TEACHERS:

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Two Courses within Create M8

- Data Visualization
 - Visualization techniques, use, criticizing
 - Individual & groups submission
- Data Driven Applications
 - Data modeling, SQL, Web application (-services)
 - Individual & group submissions

Why peer feedback?

- A lot of articles about the power of peer feedback (Gibbs, 1999; Wagner, 2016; Hattie, 2007; Ion, 2016;)
- Transition from "assessment of learning" to "assessment for learning"
- Shift from teacher centered to more student centered learning (Twente Educational Model)
- Deeper learning (receiver & reviewer)
 - receiver -> peer feedback easier to accept
 - receiver -> more feedback
 - receiver and reviewer-> academic skill
 - reviewer -> new ideas
- Less workload for teachers (grading)

Group Feedback: Motivation & Goals

- Own previous experience: individual students not mature enough (quality of individual feedback too low)
- Move from individual feedback to group feedback
- => Group Feedback
 - Feedback done in groups
 - Hope: wisdom of the crowd => higher quality
 - But: more review load

(Gr)oup (f)eedback (t)ool y

- Requirement analysis existing software: Growdgrader, Sparkplus, TurnitIn, Calibrated Peer Review, PeerScholar, Annnotietool, WebPA, CatMe, PeerWise, ...
- Existing software only allows feedback from student to student/group feedback only via detours



Development of Groufty through students

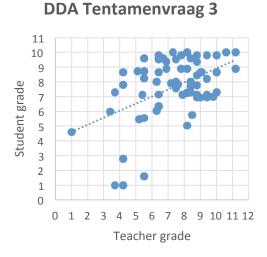
- General schema (course unspecific)
- Evaluated two developer teams
- Most promising dev. team finished product during course grading

Process

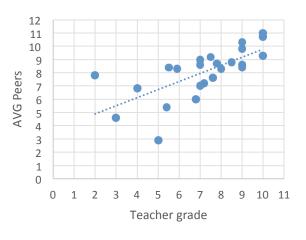
- Individual / Group Submission (homework, assignments, exam)
- Three groups are randomly assigned to review (no self review)
- Students can flag inappropriate feedback
- Default: median grade, except:
 - Student flag
 - Gades to far apart

Findings

- Resistance to review "factual" assignments:
 "is this SQL statement correct"
- Review quality varies widely: from "good stuff / you suck" to multi paragraph constructive reviews
- Unfortunately low correlation to teacher grading (0,5-0,7)







Student Survey

| | DDA % | DataVis % |
|---|----------|--------------|
| easy to work with the system | 78 | 78 |
| easy to enter reviews | 68 | 68 |
| qualified to provide a meaningful reviews | 22 | 87 |
| I learned something by writing reviews | 46 | 61 |
| Peer reviewing other students helped me to get ideas how to improve my own submission | 62 | 75 |
| My groupmates were highly involved in the peer review debates | 72 | 75 |
| I received useful peer reviews | 22 | 70 |

Student Survey

- Groufty easily accessible
- Layout could be optimized
- DDA:
 - 'Please only use it on assignments where everyone is qualified, I did not study very well for the DDA exam and will focus on the resit, so I felt unqualified to judge others' work.'
- DataViz
 - Able to give feedback

Conclusion

- Two courses in Create Module 8: DataViz and Data Driven Apps
- Group feedback: deeper learning
- Groufty Software: first version, needs improvement (LISA?)
- Varying review quality, low correlation with teacher grade
- => Group peer feedback needs further research for frequent use in teaching

Discussion

- Should we implement more peer feedback in our modules/courses
- Should we teach how to give feedback?
- Do we need a digital tool for the organization of peer feedback?
- What next in Module 8?

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