

# **Peer evaluation, students evaluating students**

- experiences from BI2044 Etologi

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# Benefits of Students Marking the Work of Other Students

- Saves the teacher time/effort
- The reliability of student marks usually matches (or improves on) that of teacher marks
- We get to address issues like student reluctance to give (bad) marks or tendencies to favour friends, etc.
- Learning about marking is useful in itself & should improve future student performance in assessed work
- Marking also becomes part of the student's learning experience concerning the academic topics covered

# Issues When Students Mark the Work of Other Students

- A clear description of the marking criteria becomes crucial, including acknowledgments of the role of subjectivity in assigning marks (e.g. rank order then classify)
- Further refinement of the marking criteria can also become part of the student learning experience
- Probably works better for formative than summative assessments
- More challenging but also more effective when marking essays & lab reports compared to short answer & multiple choice questionnaires

Handbook advice from the Universities of Reading and Exeter, UK:

<http://as.exeter.ac.uk/academic-policy-standards/tqa-manual/lts/peerselfassessment/>

<https://www.reading.ac.uk/engageinassessment/peer-and-self-assessment/peer-assessment/eia-why-use-peer-assessment.aspx>

What reservations might individual teachers & institutions like NTNU have about peer assessment (e.g. in final marks awarded in summative assessments)?

And one from Sydney University, Australia:

[https://sydney.edu.au/education\\_social\\_work/groupwork/docs/SelfPeerAssessment.pdf](https://sydney.edu.au/education_social_work/groupwork/docs/SelfPeerAssessment.pdf)

A report from Loughborough University, UK on student reactions to peer assessment of team projects (good for further literature on formal studies in education):

<https://dspace.lboro.ac.uk/dspace-jspui/bitstream/2134/3040/1/IJMEPaper%20190%20%23%20final2.pdf>

# BI2044 Ethology – Practicals

- **Problem-solving games** where the student plays the part of the animal...
- An effective way to teach complex game theory & how it relates to actual behavioural mechanisms (rules-of-thumb) used by animals in nature
- Usually a lot of fun for the teachers & the students...
- Scheduled at the start of the course, because it makes subsequent teaching sessions more informal & interactive (e.g. more questions/discussion)
  - i.e. a good opportunity for collective peer assessment as an additional educational experience...

# BI2044 Ethology – Practicals

- **Problem-solving games** with 'counters' as currency that students have to maximise to survive & win the game
  - (a) optimal load sizes in central-place foraging
  - (b) ideal free distributions into optimal group sizes
  - (c) hawk-dove contests of frequency-dependent aggression
  - (d) public goods games of social reputations in cooperation
- The students themselves collect the data, which is then put online for them to download & analyse
- A follow-up session a few days later to show the results & discuss conclusions (& reward the winners with beer &/or chocolate!)
- Individual write-ups of the class data set for one of the randomly assigned practicals (a-d) – deadline in 3 weeks

# BI2044 Ethology - Marking

- Classroom session 1 involves groups of four (that wrote up 4 different practicals a-d) marking anonymous write-ups of all 4 practicals (a-d) - i.e. from another group
- Students are encouraged to write constructive comments on the write-ups, & discuss any issues in their group when awarding a mark (A-F)
- Teachers then check the comments & marks
- Classroom session 2 (using the same groups of four) with whole class discussions of issues arising from the marking & the scientific content of any write-ups

# BI2044 Ethology - Marking

- The number & quality of comments, & the distribution of marks, from the students in 2016 were as good as teachers in previous years
  - used in pass/fail criterion, with A-E proceeding to final exam
- The experience of marking appears to better reinforce the material from the practical classes, especially the other 3 practicals they didn't write up themselves?
- Students also learn about & reflect upon the process of marking & what makes a good write-up (but perhaps we need a second round of write-ups to test if they have learnt how to better write-up such data...?)



# Discuss in Small Groups

Where in your own teaching could you usefully incorporate student marking (i.e. where would it work best & why)?

What challenges &/or benefits do you foresee in student marking on your own course(s)?