Student engagement and assessment: a new model for continuous online examination

Dr Chris Moore
Department of Applied Sciences
UWE, Bristol

@ceemour

The problem with traditional exam models

- Bunching of exams in narrow timeframes
- One time point
- One shot
- Attendance in class prior
- Feedback
- Improvement
- Revision cramming
- Retention
1st steps - Mobile Device Based Assessment

Advantages over traditional MCQ/paper based

• Randomised questions
• Randomised order of answers
• Inclusive of all learners
• Feedback on completion
• Instant and automated marking
• Instant reporting of marking to admin
Partial win - What Next?

- MCQs done digitally not shown to affect grades compared to paper
  - But does provide a better assessment for learning experience as well as more user friendly

- Can we expand this to a more engaging way of posing questions?
  - Varied Online Questions (VOQs)

- From here, can we improve engagement throughout the academic year?

New model - keep ‘em coming

- Monthly basis - 6 across year - best 5 out of 6
  - Each mini-exam that counts therefore worth 20% of total exam component

- 30Qs - 20Q on last two lecture weeks, 10Q on all previous lecture weeks

- Sat in lab at end of timetabled practical of week following last two lecture weeks

- Online on tablets - varied online questions (VOQs)
  - Score direct to blackboard - see build up of marks as year progresses
  - Review corrects and incorrects on completion - identify strengths and weaknesses and effort
Performance - Exam 3 group averages

Average Performance Vs Previous years

NUMBER OF GRADES WITHIN RANGE

2013-14: MCQ paper based
2014-15: MCQ paper based
2015-16: MCQ tablet and paper
2016-17: VOQ online monthly
Issues to address

• Are they engaging?
  • Need qualitative data on whether students are revising “a little” all the time, or simply revising last minute for each monthly exam

• Are they learning?
  • Module and anecdotal feedback suggests yes, but does this include recognition of improved engagement with materials leading to improved outcomes, or just of last minute revising of topics performed poorly in last test?

Future work

• Incorporate engagement survey

• Topic by topic analysis
  • Were questions on repeated material improved on?

• Student by student analysis
  • Did highest scoring student(s) consistency improve and did lowest scoring maintain, decrease, or slowly improve?