The long winding road

Insights from student misconceptions

Helene N. Andreassen, Torstein Låg & Mark Stenersen
Co-writers: Lars Figenschou & Mariann Løkse

UiT The Arctic University of Norway
Some 2015 challenges to online teaching and online learning
How to balance learner control and structure and teacher guidance?

The student’s desire for autonomy risks being counterproductive to the learning process (McLoughlin & Lee, 2010)
How to best respond to the students’ wish for live, structured and interactive activities, online?

Time and focus devoted to development/evaluation of course design is crucial to optimize student engagement (Wanner & Palmer, 2015)
How do we, and the users, get the most out of in-course vs. exam activities?

The evaluation of online performance is dependent on the very content and format of activities (Admiraal, Huisman & Pilli, 2015)
Do we wish to provide our in-course activities with both a summative and a formative function?

The evaluation of online performance is dependent on the very content and format of activities (Admiraal, Huisman & Pilli, 2015)
Outline

iKomp in brief, In-course activities and exam, User data, Linking the components and Lessons learned
iKomp

An open online resource

The (naive) making of iKomp

Motivation
Reduce focus on details and place information literacy in a broader context

Objective
Enhance the students’ learning through critical thinking and academic integrity
In-course activities

To engage and self-test
• Contextualized introduction
• Automatic feedback on performance

Test yourself
• Five questions
• Multiple choice
• Plausible alternatives
• Explanation to each answer, always accessible
Final exam and course certificate

Content
- 40 questions multiple choice
  (80% (32/40) to achieve course certificate)
- Explanation
  Supplementary context, encourage repetition of course content

Settings
- Wrong answers: red cross
- Questions: fixed order
- Attempts allowed: unlimited
- Explanation: always accessible
Different people, different intentions
Some groups for whom iKomp is an obligatory assignment

890 registrants
Behavior

- 44.7% (398/890) users taken the exam
- 97.6% (388/398) users passed the exam
- 24.4% (97/398) users passed on first attempt
- 24.8% (99) users more than 10 attempts
Observations

Low rate on first attempt
→ difficult questions or little effort?

Number of attempts + very little time from first to last attempt
→ indicates little effort to learn
In-course activities and exam

- 17.9% of users correctly completed all of the module self test activities.
- 38.4% of users did some (but not all) of the module self test activities.
- 43.5% of users did none of the module self test activities.
- 17.1% of users took the exam without first doing the module self test activities.

(159/890) users
(342/890) users
(387/890) users
(68/398) of users
There is a positive, but very weak, association \((r = .18)\) between number of correctly completed self test activities and score on the first exam attempt.