Research on learning and teaching over the last 40 years: how can we ground research and practice around OERs in what we already know?

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Synopsis

• Approaches to studying in higher education
• Students’ perceptions of academic quality
• Students’ conceptions of learning
• Approaches to teaching in higher education
• How does all this apply to OERs?
Approaches to studying

• Students in higher education adopt two different approaches to their studies:
  • a deep approach oriented towards the meaning of their course materials;
  • a surface approach oriented towards being able to reproduce the materials for the purposes of assessment.
Approaches to studying, ctd.

- The *same* students can exhibit *different* approaches to studying in *different* courses.
- This may depend on the demands of different courses, the quality of the teaching, and the nature of the assessment.
- Eley (1992) found considerable variation in how *different* students perceived the demands of the *same* courses.
- So the effects of contextual factors on students’ approaches to studying are mediated by their perceptions of their environment.
Contextual factors → Perceptions of academic context → Approaches to studying
Perceptions of academic quality

- Ramsden (1991) developed the Course Experience Questionnaire (CEQ) as an indicator of the quality of teaching on programmes at Australian universities.
- A variety of investigations have shown that students who rate their courses and programmes more positively on the CEQ are *more* likely to adopt a meaning orientation to their studies and are *less* likely to adopt a reproducing orientation to their studies (Richardson, 2007).
Approaches to studying, ctd.

• Nevertheless, *different* students taking the *same* course may adopt *different* approaches to studying.
• This remains the case even when variations in their perceptions have been taken into account.
• Marton (1975) suggested that students adopt one approach rather than another, depending upon their conceptions of learning and of themselves as learners.
Conceptions of learning

• Students may hold a *reconstructive* conception of learning based upon personal interpretation or a *reproductive* conception of learning based upon memorisation.

• Students who hold a reconstructive conception of learning are more likely to adopt a meaning orientation to studying.

• Those who hold a reproductive conception of learning are more likely to adopt a reproducing orientation to studying (Van Rossum & Schenk, 1984).
Conceptions of learning, ctd.

• Van Rossum and Taylor (1987) found that older students were more likely than younger students to hold reconstructive conceptions of learning.

• This suggests that the effects of demographic variables on students’ approaches to studying are mediated by their conceptions of learning.
Demographic characteristics → Conceptions of learning → Approaches to studying
A model of approaches to studying

• Here is a heuristic model to summarise these various influences on students’ approaches to studying.
Conceptions of learning

Approaches to studying

Demographic characteristics

Contextual factors

Perceptions of academic context
Approaches to teaching

- Teachers in higher education adopt different approaches to teaching (Trigwell & Prosser, 1993).
- Some adopt a teacher-focused approach aimed at the transmission of information.
- Others adopt a student-focused approach aimed at bringing about conceptual change in their students.
Perceptions of teaching context

• Approaches to teaching are influenced by the teachers’ perceptions of their teaching context.

• Teachers who feel that their departments value teaching, that their class sizes are not too large, and that they have control over their teaching are *more* likely to adopt a student-focused approach and *less* likely to adopt a teacher-focused approach (Prosser & Trigwell, 1997).
Conceptions of teaching

• Nevertheless, teachers’ approaches to teaching are also influenced by their underlying conceptions of teaching.
• Some teachers hold reproductive conceptions of teaching based on imparting information to students.
• Others hold reconstructive conceptions of teaching based on facilitating understanding and bringing about intellectual development in students.
Conceptions of teaching

• Those who hold a reproductive conception are likely to adopt a teacher-focused approach to teaching that in turn promotes a reproductive conception of learning in their students.

• Those who hold a reconstructive conception are likely to adopt a student-focused approach to teaching that in turn promotes a reconstructive conception of learning in their students (Trigwell & Prosser, 1996).
Conceptions of teaching, ctd.

• Here is a heuristic model to summarise these various influences on teachers’ approaches to teaching.
Conceptions of teaching

Approaches to teaching

Disciplinary characteristics

Situational factors

Perceptions of teaching environment
Conclusions

• Students in higher education adopt different approaches to studying.
• These approaches are influenced by their perceptions of their academic context but also by their underlying conceptions of learning.
The Study Methods Group

• The earliest research on approaches to studying was carried out by Ference Marton and his students at the University of Göteborg (Gothenberg) in Sweden.
• The Study Methods Group tried to see whether they could replicate the findings of Marton and his colleagues in the distinctive context of the Open University.
• Between 1980 and 1984, they produced 14 technical reports; some were published, but most were not.
How does this apply to OERs?

• One of the constituent scales of the Course Experience Questionnaire is concerned with students’ perceptions of good teaching.
• In the context of distance education, this splits into two scales concerned with good materials and good tutoring.
• Students’ perceptions of receiving good materials are positively associated with their overall satisfaction and positive associated with their use of a deep approach.
How does this apply to OERs?

- It follows that the use of OERs needs to be carefully evaluated against the use of alternative materials.
- Whether they are evaluated more positively, lead to higher satisfaction ratings, and promote the use of a deep approach has to be established empirically.
- Just because they are “open” does not mean that OERs are intrinsically better resources.
How does this apply to OERs?

• Another question is whether the use of OERs would make it more likely that students should acquire reconstructive conceptions of learning.

• Again, there is nothing intrinsic about “open” resources that would promote genuine intellectual development.

• But all of these are testable hypotheses that might well be evaluated in future research.
Conclusions, ctd.

• Teachers in higher education adopt different approaches to teaching.
• These approaches are influenced by their perceptions of their teaching environment but also by their underlying conceptions of teaching.
Conclusions, ctd.

• Teachers who have a reconstructive conception of teaching tend to adopt a student-focused approach to teaching.

• This promotes a meaning orientation to learning and aims to bring about conceptual change in the students.
How does this apply to OERs?

• Research has shown that teachers who feel they have control over their teaching are more likely to adopt a student-focused approach to their teaching.
• It is plausible that teachers who have more control over their teaching are more likely to make use of OERs.
• This suggests that teachers who use OERs are more likely to adopt a student-focused approach to teaching.
How does this apply to OERs?

• Another question is whether the use of OERs would make it more likely that teachers should acquire reconstructive conceptions of teaching.
• There is nothing intrinsic about “open” resources that would promote genuine professional development.
• But all of these are testable hypotheses that might well be evaluated in future research.
Want to know more?

- My 2000 book, *Research Student Learning: Approaches to Studying in Campus-Based and Distance Education*, is available free of charge on OpenLearn:
