

Does engaging undergraduate students in research transform their understandings of knowledge?

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A view of university teaching

- Teaching in higher education is about designing ways in which particular students can develop an understanding of particular bodies of disciplinary and/or professional knowledge (Ashwin et al. 2015 based on Shulman 1987).
- The transformational nature of undergraduate degrees lies in changes in students' sense of self through their engagement with disciplinary and professional knowledge;
- Students relating their identities to their disciplines/professions and the world and seeing themselves implicated in knowledge;
- Does not always happen – requires students to be intellectually engaged with their courses and to see it as an educational experience. This is dependent on both students and the quality of their educational experience (Ashwin et al 2016)

Types of research-teaching relationship (Healey 2005)

Student-focused Students as participants			
Emphasis on research content	Research-tutored Curriculum emphasizes learning focused on students writing and discussing papers or essays	Research-based Curriculum emphasizes students undertaking inquiry-based learning	Emphasis on research processes and problems
	Research-led Curriculum is structured around teaching subject content	Research-oriented Curriculum emphasizes teaching processes of knowledge construction in the subject	
Teacher-focused Students as audiences			

Research-teaching (RT) nexus

- Engaging students in research is often argued to provide an important way for students to develop more critical relations to knowledge (Jenkins and Healey 2005; Brew 2006).
- Mechanisms by which it works are unclear (Trowler & Wareham 2007) because of a tendency to focus on the benefits.
- Inquiry-based learning: Focus on active engagement and critical thinking (Healey 2005; Sproken-Smith & Walker 2010) vs. disciplinary knowledge (Levy & Petrulis 2012).
- Interested in *how* we engage students in research in order to develop their understanding of knowledge

Understanding the working of the research-teaching nexus

Using data from **Pedagogic Quality and Inequality in University First Degrees Project**, with Monica McLean and Andreas Abbas, to examine:

- Students' relations to sociological knowledge;
- How these related to the way they represented research in their dissertations;
- Students' accounts of undertaking their dissertations;
- The implications this has for RT Nexus given that dissertations signal entry into community of researchers (Brew 2006)

(See Ashwin et al. 2017 for full account of this element of the project)

Relations to sociological knowledge

5. Sociology offers a number of different ways to study the relations between people and society each of which offers a different and partial picture of these relations.
4. Sociology is the study of the relations between people and societies and includes me.
3. Sociology is the study of societies/other people.
2. Sociology is the modules that I study.
1. Sociology is about developing my opinions on a broad range of issues.

(Ashwin et al. 2014)

Discipline	Studies	Least inclusive Account	'Watershed' account	Most Inclusive account
Mathematics	Wood et al. 2012	Numbers	Models	Approach to life
Accountancy	Sin et al. 2012	Routine work	Meaningful work	Moral work
Law	Reid et al. 2006	Content	System	Extension of self
Music	Reid 2001	Instrument	Meaning	Communicating
Geography	Bradbeer et al. 2004	General world	Structured into parts	Interactions
Geoscience	Stokes 2011	Composition of earth	Interacting systems	Relations earth and society

Relations between accounts of sociology and dissertations

- In examining students' dissertations, in most cases (80%) students' representation of knowledge in their dissertation was more inclusive than their accounts of sociology in their second year interview.
- Suggests that students' engagement in research **does not always** transform their relations to sociological knowledge.
- Key factors appear to be:
 1. All students were interested in their dissertation topic;
 2. However, changes happened when students saw sociology as a way of addressing a topic they were interested in;
 3. In some cases, tutors played a key role in helping students to see their topics sociologically.

Sociology to address topic

In this area of study, distinction, we talk about appearance, cloths and even beauty factors to a certain extent. But hair is somewhat forgotten. I might be completely wrong but there isn't a huge array of literature. There is sociology of the hair, but less about what I found about the ways in which it is manipulated by women as a mark of class distinction.

(Ester, Selective, Year 3)

Interest without sociology

I'm analysing why some stories get covered and some don't. I started off on why some human rights violations get covered and some don't. I just decided to focus on cluster bomb investments by banks and I'm quite interested in the media so I decided to do that... For example, the other day I found out that one of the non-executive chairmen of the BBC is from Barclays and Barclays is the number one investor in cluster bombs in the UK. So that kind of connection, so those sorts of things, I'm just looking into. (Fifi, Prestige, Year 3)

Role of tutor

I think I've been really lucky, like with the relationship I've got with my tutor... I really trust what she's saying and what she suggests to me, because a lot of my friends have tutors that ... are not very proactive, they just leave you alone. So to know that she knows what she's on about is really reassuring. It just takes so much will-power, doesn't it? it's just down to you to go and write ten thousand words.

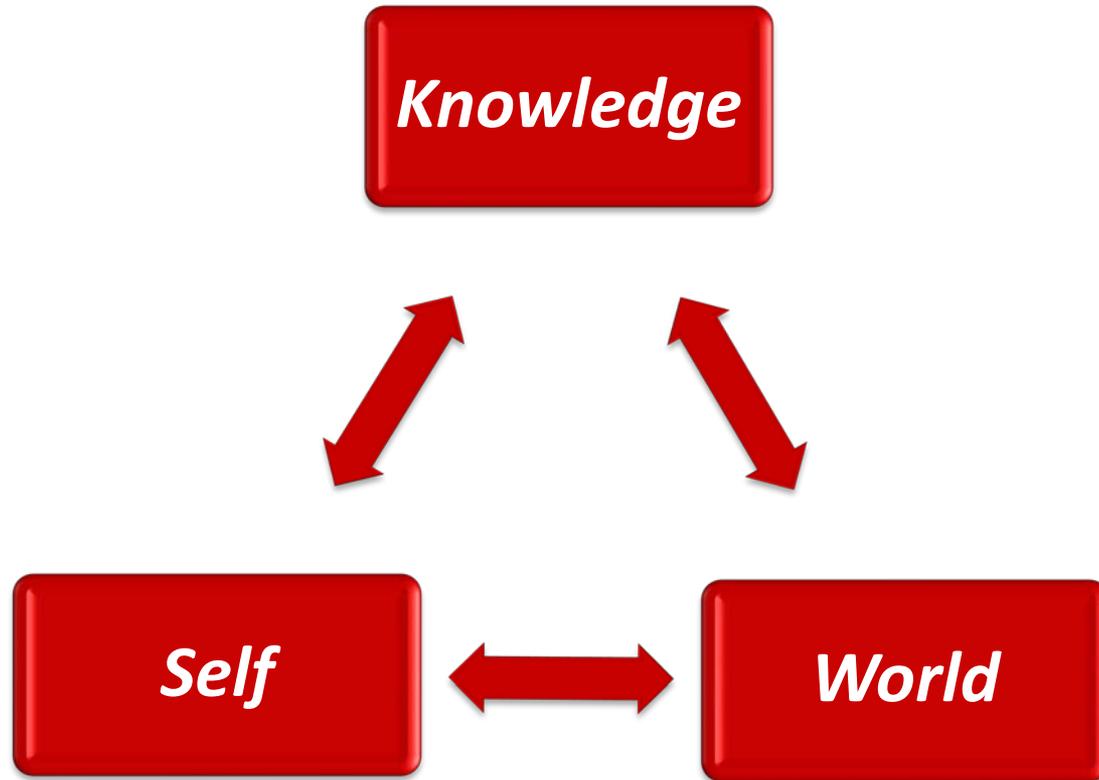
(Fiona, Prestige, Year 3)

Implications for RT Nexus

In order for engagement in research to transform students' understanding:

- Students need to see their disciplines or profession as providing a way of framing their research. They need to be committed to their disciplines/profession.
- University teachers play a crucial role in helping them to develop this framing and commitment.
- Relates to wider finding of our project that the transformational nature of undergraduate degrees lie in the relations between students' views of themselves and their engagement with knowledge (Ashwin et al. 2016)

The transformative power of an undergraduate education



Using the R-T nexus to design activities to support student learning

- What account has been taken of who your students are and what they know?
- How will the expertise of teachers be used to support students' engagement with knowledge?
- How will other resources (including other students, readings, technologies) support this engagement?
- How and why do you expect it to lead to new understandings for your students?
- What evidence (from data on your teaching practices, investigations of your practices, and the literature) do you have which will help you to develop answers to the questions above?

It is important to be clear that this is difficult, collective, intellectual work, which involves on-going dialogue and experimentation (Ashwin et al 2015).

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