

Reconstructing academic integration as contributions to knowledge: the case of the doctoral thesis

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Overview of talk

- Reconstructing academic integration as learning communities
- Students as researchers
- The case of the doctoral student
- International doctoral students researching internationalisation
- Ideas to take forward into policy?



Reconstructing academic engagement

- Academic integration is seen as a key element in engaging and retaining students in higher education yet models of integration tend to focus on individual and/or institutional characteristics (e.g. Tinto, 1993). This can lead to a deficit model of students.
- In particular, international students have been described as 'silent', both literally and figuratively, in western universities (Singh, 2009; Hsieh 2007).
- Recasting students as researchers at all levels enables them to become active contributors to the academic community



Students in learning communities

- Students need to be 'apprentice' researchers at all levels
- They need to be encouraged and integrated as members of learning communities where their knowledge counts and they are seen as contributing

'The learning community structure establishes an interactive, collaborative environment that helps students' transition to the university setting, by encouraging social interaction and building social capital' (Brouwer and Jansen, 2019).



Students as researchers

 All higher education students should be recast as researchers – from UG to PG and PGR

'No reason exists to preclude... university students from becoming critical student researchers. A democratic and informal but intellectually disciplined classroom can become a venue in which teachers and students create and re-create knowledge' (Kincheloe and Steinberg, 1998).



'Contemporary universities are powerful institutions, interlinked on a global scale; but they embed a narrow knowledge system that reflects and reproduces social inequalities on a global scale' (Connell, 2017).

Despite the fact that many doctoral students, particularly international students, carry out significant research in their doctorates, this knowledge is rarely surfaced as a coherent body of knowledge from which the international higher education community can learn. This is a form of exclusion.

This paper argues that the knowledge generated by doctoral students could illustrate new perspectives on a range of social and educational issues and could lead to more meaningful integration for students as they build knowledge for their own country contexts.





Digital, searchable repository of over 500,000 Doctoral theses

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Constructing Doctoral theses as powerful knowledge

© 2018 European Association for Surfacing "Southern" Perspectives on Student Engagement With Internationalization: Doctoral Theses as Alternative Forms of Knowledge

Catherine Montgomery

This article explores how knowledge represented in doctoral theses exploring internationalization may be constructed as a source of "Southern" knowledge on The article aims to surface some of the ways in which the andents could illustrate new perspectives on



	Overall search criteria	Inclusion/exclu sion criteria	N=number of theses retained	Analysis
Phase 1	Search of whole EThOS database of the British Library: using specific vocabulary: 'student engagement' with' higher education' and/or 'internationalis/zed education', 'internationalis/zation' with 'higher education'. A 'Post-colonial knowledge' category was initially included but dropped as theses were found to be not relevant to HE.	All theses written by UK and international doctoral students in UK HEIs housed in the British library	Internationalisa tion in HE category: yielded 58 downloadable theses; student engagement in HE yielded 322 downloadable theses	Theses categorised roughly into folders: internationalisation of HE and student engagement. Filtering process to exclude theses without an international perspective (particularly in the student engagement category).



of the 380 theses' abstracts		the state of the s
of the 300 theses abstracts	on-at-school-	individually and where further
to look for relevance to HE,	level topics were	information was needed the
international perspectives	excluded;	main thesis was considered.
in theses written by UK, EU		
or international students	Non-HE topics	A separate adjacent key word
with a focus on	excluded	search (e.g.
internationalisation in UK		'internationalisation higher
higher education;		education' was carried out by
international students in		EThOS team at the British
UK universities researching		Library and this generated 78
internationalisation issues		items which were all present in
in relation to HE but in their		the set of 94.
local context		



Phase 3	Using NVivo the remaining theses were analysed. A 'byhand' examination of each of the theses' abstracts and titles generated examples of interest to support patterns emerging in the coding.	All 94 theses considered	94	Thematic coding of all 94 theses to generate ideas. A closer analysis of particular theses' titles, abstracts and some main theses where clarification was sought.
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Findings

the geographies of student engagement with internationalisation

methodologies and theory

constructions of internationalisation



Geographies of internationalisation

a geography of the knowledge represented in the doctoral theses emerged:

 Of the 94 theses analysed, 34 of them investigated internationalisation in the UK or international students in the UK. Much of this research was carried out by international students themselves and covered international students' experiences in UK higher education.



exploring own systems of HE

Where the theses were written by international students, they also often carried out research on their own higher education systems, with a broad spread of the theses over different continents and across 38 different countries of the globe; the theses examined internationalisation of higher education in African countries, the Americas and Australia, across the Asian continent and Europe.



A pattern of quasi-globalisation?

International students come to the UK to research internationalisation, but the focus is narrow and either relates to the UK or to their own country.

'Social scientists working in the periphery have a strong orientation to the world centres of their disciplines in the metropole' (Connell 2007, 217) and the tendency for 'Northern knowledge' to dominate is persistent.



Methodologies and theory

- methodologies were almost exclusively qualitative or mixed methods approaches – suggesting an emic perspective but consistent with the tendency for the theses to interrogate students' own higher education systems
- But some innovation with large or longitudinal data sets or collection of 2 data sets



Dominance of Western theory

- predominance of Western theory used by the international students as a lens on their nonwestern educational contexts
- those exploring the UK context also used dominant western theory and theorists
- many theses relied on concepts commonly associated with Western theory such as social capital, global citizenship or communities of practice

(This requires further and more detailed exploration)



Limits in the research imagination?

The limitations in the use of Western theory could be an inhibiting factor in the 'research imagination' (Appadurai 2001) with regards to understandings of internationalisation of higher education.

Connell would name this as a gesture of exclusion, where theorists from the colonised world are rarely cited in metropolitan texts and are not considered a part of the dialogue of theory (Connell 2007, 46).



Some alternative perspectives?

- a thesis exploring students' relationships with their university considered the intangible elements of the student experience, what the 'something about the place' was that led students to develop a sense of attachment or belonging.
- 'nomads in contested landscapes' which aimed to reframe student engagement and 'nontraditionality' in internationalised higher education



Challenging the grand narratives?

What is needed to challenge dominant ways of thought in an unequal society is 'the view-frombelow' (Connell 2007, 221)

 But the PhDs from the global South, were strongly influenced into developing Northern theory and using Western lenses

Possibilities offered for developing Southern knowledge and perspectives in the doctoral encounter?



Intercultural translation of knowledge?

Possibilities dependent on the capacity of the participants, and most specifically on the dominant supervisor, being open to the work of 'mediation and negotiation' which De Sousa Santos describes as 'intercultural translation'

(De Sousa Santos 2014, 222).

Complex issues of (non?) universality of knowledge?



Decolonisation of methodologies?

- further questions to be asked of this sort of data, particularly with reference to the forms and sources of the theories used in the theses and also the sorts of questions asked?
- A Southern approach may ask different sorts of questions as in the case of Linda Tuhwai Smith's work on decolonisation of methodologies which asks about the role of social science itself in oppressing communities' knowledge (2012).



Comparative analysis and digital tools?

- potential model for further comparative analysis of bodies of doctoral knowledge, given that a growing number of countries are developing and improving access to their digital doctoral research repositories (Australia, Canada, China, South Africa and USA to name but a few).
- This huge comparative and open access data set could provide a means by which 'Southern' knowledge might be surfaced...
- …plans to conquer methodological and technological challenges!



EThOS 3: Collective Intelligence

 Partnership with Dr Craig Stewart, Computing Sciences, Durham University and Sara Gould, Head of EThOS team at the British Library

Aim to:

- harness collective intelligence approaches to surfacing knowledge generated by doctoral theses, by testing machine learning approaches to mining and analysing the repository to address key social issues.
- test whether a new platform using machine learning can make the human knowledge represented in the theses useful to schools, universities, health, well-being and social organisations seeking empirical evidence for a range of purposes.



EThOS 3 – insights for practitioners?

- The EThOS repository contains 500,000 theses many containing unique, unreported research findings.
- For example: [ageing] generates 24,779 theses, [migration] generates 6857 theses and [homelessness] generates 279 theses.
- The experiment will utilise unsupervised machine learning models (such as Clustering and Natural Language Processing) with further insight gained from Deep Learning techniques to try to draw unseen and unknown connections from the EThOS corpus that will highlight and guide the study of societal challenges – provide insights for practitioners.



EThOS team noting new queries – leads to follow

- The Alzheimers' Society used EThOS metadata to help assess the state of research careers and showed 70% of PhD students in dementia-related research areas have left the field within 4 years.
- The French Academy of Agriculture used EThOS data in the field of soil science to support a research project to examine soil education and research trends.
- An international language learning project called FLAX used UK thesis
 abstracts in a suite of tools to support higher level researchers whose first
 language is not English. Thesis abstracts are particularly valuable because of
 their topic-specific language and phrasing, consistent layout and written style,
 and the highly academic nature of the research they describe.
- The Royal Society of Chemistry & University of Bristol ran a pilot project to identify new molecular compounds described in print and PDF theses; the project extracted 45k compounds in 4 months from a handful of theses; 50% were 'new' and a further 20-30% cited only once by author themselves.



Doctoral enquiry using EThOS

 And a new ESRC collaborative PhD between the British Library and King's College London will use computational analysis and text mining methodologies to analyse research genealogies and the flow of ideas between researchers, taking EThOS content and UK theses as its main source content

https://liss-dtp.ac.uk/case-studentships-student-applicants/#



The value of student research

- Student research has the potential to make significant contributions to knowledge in the field of Health, Science, Social Science and Education
- As universities, we need to locate and encourage platforms and spaces where students can contribute
- Integration through knowledge contribution is the most meaningful way of ensuring that students are fully included in the academy



Networked universities and multi-contextual worlds

 How can contemporary universities change in order to enable genuine knowledge interaction to emerge?

- Transformation is required in the way we network with our research and in the way we teach – to include student research
- Pedagogic change is required in all contexts



Are universities 'set up for an age long gone'?

• 'From the perspective of influencing change, the challenge will be to overcome resistance that is deeply rooted in some of our institutions that were set up for an age long gone. However, if the purpose of university education is to interrogate and challenge old paradigms of knowledge to build new knowledge and ways of knowing then it [integrating student research] need not sit in contrast but rather be considered a natural development of a dynamic institution'.



Comments and questions welcome!