



**THE UNIVERSITY OF
NORTHAMPTON**

Undergraduate engagement with their tutors' original research

A work in progress report

Carey Hime, Nick Dimmock and Maggie Pickton

Library and Learning Services Conference

18th June 2014

Transforming lives, inspiring change



**THE UNIVERSITY OF
NORTHAMPTON**

Outline

- Introduction and literature
- Methods and data collection
- Data analysis and key findings
- Implications for practice and reflections

Transforming lives, inspiring change



THE UNIVERSITY OF
NORTHAMPTON

Introduction

- URB@N project: a joint student/staff research project
- The research team: Carey, Nick and Maggie
- LLS Research Support Team interested in:
 - enabling and promoting open access to university research e.g. through [NECTAR](#), [Northampton Open Journals](#)
 - could these services be used in support of teaching and learning?
- ...leading to the broader question of how researchers used their research in teaching and what effect this had on student learning

Transforming lives, inspiring change



THE UNIVERSITY OF
NORTHAMPTON

Background

The 'teaching-research nexus' – conflicting findings:

- Fox (1992): teaching and research activities are antagonistic, competing for time and resources
- Healey *et al.* (2010): students perceived clear benefits to their learning from staff research, but disadvantages too
- Stappenbelt (2013): qualitative studies of staff perceptions report a mutually beneficial relationship at the individual level, but quantitative studies report little or no correlation between research productivity and teaching effectiveness
- Verburgh *et al.* (2007): consistent empirical evidence is difficult to retrieve

Transforming lives, inspiring change



Literature review

Perspectives on the teaching-research nexus: some studies

Student	Academic staff	Both
Ball and Mohamed (2010)	Bennett (2011)	Buckley (2011)
Deakin (2006)	Boyd et al. (2012)	Verburgh et al. (2007)
Guerin and Ranasinghe (2010)	Douglas (2013)	Visser-Wijnveen et al. (2012)
Healey et al. (2010)	Elen et al. (2007)	Zamorski (2002)
Neumann (1994)	Gottleib and Keith (1997)	
Robertson and Blackler (2006)	Shin (2011)	
Turner et al. (2008)		



**THE UNIVERSITY OF
NORTHAMPTON**

Project plan

- Identify area of research interest
- Submit proposal for URB@N project
- Conduct literature review to establish current knowledge:
methods used and previous findings
 - Construct questionnaire
 - Gain ethical approval
 - Conduct pilot study
 - Commence full study

Transforming lives, inspiring change



The questionnaire

- Semi structured interviews with closed and open questions
- Based on questionnaire created by Healey *et al.* (2002)
- 15 questions addressing:
 - Students' awareness of research activity at the university in general and of their tutors' research activity specifically
 - Students' engagement with their tutors' research
 - The impact of tutors' research activity on student learning
 - Students' ability to access tutors' research outputs



THE UNIVERSITY OF
NORTHAMPTON

Data collection

- 31 participants from contrasting disciplines (two campuses)
- Sampling method: opportunity/convenience sampling
- Questionnaire administered face to face
- Data captured anonymously
- Planned to use an iPad to capture responses directly to a Google form
- Initial pilot study

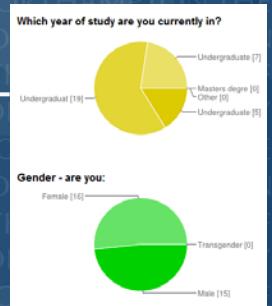
Transforming lives, inspiring change



THE UNIVERSITY OF NORTHAMPTON

Data analysis

- Google Drive summary of responses: great
- Full response spreadsheet: not so great
 - A pain to navigate in Drive itself
 - CSV export scuppered by commas in response options
 - Hacky solution: split responses by `/,\s[A-Z]/`
 - Better solution: plan ahead
 - Avoid or take care with multiple choice answers
 - Stress test with detailed responses
 - Bonus caveat: you can't remove responses from the spreadsheet



Transforming lives, inspiring change



THE UNIVERSITY OF
NORTHAMPTON

Data analysis

Anyway...

- Basic analysis via built-in summary
- Some additional Excel work (via Drive export)
- (Eventual) CSV export allows deeper processing with SPSS or custom scripts (e.g. cross-referencing responses)

```
[You actively searched for your tutor's research] => Array
(
    [
        [count] => 5
        [ids] => Array
        (
            [
                [0] => 2
                [1] => 3
                [2] => 4
                [3] => 12
                [4] => 28
            ]
        )
    ]
)
```

- Further analysis may inform follow-on research

Transforming lives, inspiring change



THE UNIVERSITY OF
NORTHAMPTON

Key findings

- Very positive results
- 2/3 aware of tutors' research
- 2/3 of above aware of use of research in teaching
- Lots of sharing & discussion as a result

Talk to your tutor about it	11	26%
Talk to another student about it	10	24%

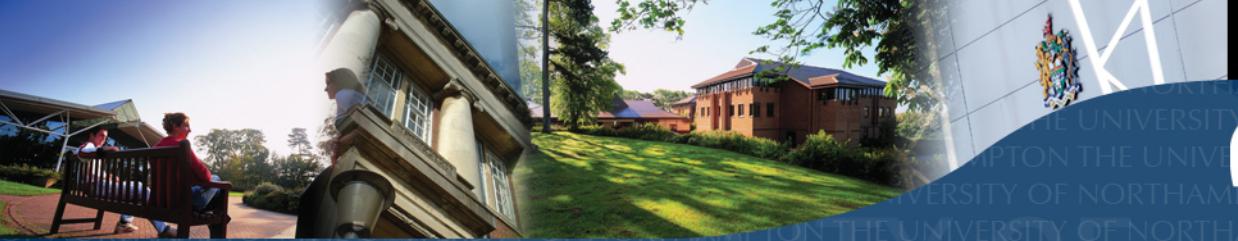
- 52 positive impacts vs. 4 negative

It has increased your understanding of the subject	8	15%
It has stimulated your interest and enthusiasm for the subject	13	25%
It has made you more keen to attend classes	5	10%
You have greater confidence in the currency and credibility of your tutor's knowledge	8	15%

Transforming lives, inspiring change



THE UNIVERSITY OF
NORTHAMPTON



Student comments

- "I know one of my tutors has published a book. We haven't really used it in a class activity for anything but we did have a discussion about it which was really interesting to hear about."
- "I think engaging with tutors' research definitely helps students to develop a relationship with them. It's great to see what their interests are and see their successful results."
- "I have a lot more respect for my tutor after reading her research. I trust that she knows the subject she's teaching."
- "It's really inspiring when tutors tell us about trips they've taken and projects they're doing. It gives me ideas of things I could do when I graduate and what the field is really like to work in."

Transforming lives, inspiring change



THE UNIVERSITY OF
NORTHAMPTON



Implications for practice

- Students have a high level of awareness of their tutors' research activity and are generally positive about it
- The largest numbers of students learned about it through lectures, reading lists and via social media (Facebook and Twitter were most commonly cited)
- They would like to hear more, but only if it is relevant to a lecture topic or assignment
- Students chose lecture slides and class discussions as their favoured ways for tutors to integrate their research into teaching

Transforming lives, inspiring change



THE UNIVERSITY OF
NORTHAMPTON

Reflections

- Having an undergraduate student in the research team was a huge asset (thank you Carey and the URB@N scheme!)
- Having struggled with extracting raw data from the Google form we would not recommend this tool for further use
- The face to face interviews allowed us to field test the questionnaire; next time we would consider presenting it as an online survey
- This is a work in progress. We would like to pursue this research topic, perhaps in conjunction with academic colleagues – any volunteers?

Transforming lives, inspiring change



**THE UNIVERSITY OF
NORTHAMPTON**

Questions?

Transforming lives, inspiring change



References (1)

- Ball, S. and Mohamed, M. A. T. (2010) Insights on how students perceive the research-teaching nexus: a case study of hospitality management students. *Journal of Hospitality, Leisure, Sport and Tourism Education.* **9**(2), 89-101.
- Bennett, D. and Blom, D. (2011) Constructing pedagogy: the nexus between artistic practice, research and teaching. In: E.Mackinlay and D.Forrest (eds.) *Australian Society for Music Education XVIII National Conference, July 2-5, 2011*, 74-78. Gold Coast, Australia: ASME.
- Boyd, W.E., O'Reilly, M., Rendell, K., Rowe, S. and Wilson, E. (2012) 'Friday is my research day' : chance, time and desire in the search for the teaching-research nexus in the life of a university teacher. *Journal of University Teaching and Learning Practice.* **9**(2).
- Buckley, C. A. (2011) Student and staff perceptions of the research-teaching nexus. *Innovations in Education and Teaching International.* **48**(3), 313-322.
- Deakin, M. (2006) Research led teaching: a review of two initiatives in valuing the link between teaching and research. *Journal for Education in the Built Environment.* **1**(1), 73-93.



References (2)

- Douglas, A.S. (2013) Advice from the professors in a university Social Sciences department on the teaching-research nexus. *Teaching in Higher Education*. **18**(4), 377-388.
- Elen, J., Lindblom-Ylanne, S. and Clement, M. (2007) Faculty development in research-intensive universities: the role of academics' conceptions on the relationship between research and teaching. *International Journal for Academic Development*. **12**(2), 123-139.
- Fox, M. (1992) Research, teaching, and publication productivity: mutuality versus competition in academia. *Sociology of Education*. **65**, 293-305.
- Gottlieb, E.E. and Keith, B. (1997) The academic research-teaching nexus in eight advanced-industrialized countries. *Higher Education*. **34**(3), 397-419.
- Grant, K. and Wakelin, S.J. (2009) Re-conceptualising the concept of a nexus? A survey of 12 Scottish IS/IM academics' perceptions of a nexus between teaching, research, scholarship and consultancy. *Teaching in Higher Education*. **14**(2), pp. 133-146.



References (3)

- Guerin, C. and Ranasinghe, D. (2010) Why I wanted more : inspirational experiences of the teaching-research nexus for engineering undergraduates. *Journal of University Teaching and Learning Practice*. **7**(2).
- Healey, M., Jordan, F. and Short, C. (2002) *The student experience of teaching, research and consultancy*. Questionnaire cited by Healey, M., Jordan, F. Pell, B. and Short, C. (2010). Available from: <http://trnexus.edu.au/uploads/downloads/TR%20Questionnaire.pdf>
- Healey, M., Jordan, F., Pell, B. and Short, C. (2010) The research-teaching nexus: a case study of students' awareness, experiences and perceptions of research. *Innovations in Education and Teaching International*. **47**(2), 235-246.
- Neumann, R. (1994) The teaching-research nexus: applying a framework to university students' learning experiences. *European Journal of Education*. **29**(3), 323-338.
- Robertson, J. and Blackler, G. (2006) Students' experiences of learning in a research environment. *Higher Education Research & Development*. **25**(3), 215-229.



References (4)

- Shin, J. C. (2011) Teaching and research nexuses across faculty career stage, ability and affiliated discipline in a South Korean research university. *Studies in Higher Education*. **36**(4), 485-503.
- Stappenhelt, B. (2013) The effectiveness of the teaching-research nexus in facilitating student learning. *Engineering Education*. **8**(1), 111-120.
- Turner, N., Wuetherick, B. and Healey, M. (2008) International perspectives on student awareness, experiences and perceptions of research: implications for academic developers in implementing research-based teaching and learning. *International Journal for Academic Development*. **13**(3), 199-211.
- Verburgh, A., Elen, J. and Lindblom-Ylanne, S. (2007) Investigating the myth of the relationship between teaching and research in Higher Education: a review of empirical research. *Studies in Philosophy and Education*. **26**(5), 449-465.
- Visser-Wijnveen, G. J., Driels, J. H. v., Rijst, R. M. v. d., Visser, A. and Verloop, N. (2012) Relating academics' ways of integrating research and teaching to their students' perceptions. *Studies in Higher Education*. **37**(2), 219-234.
- Zamorski, B. (2002) Research-led teaching and learning in higher education: a case. *Teaching in Higher Education*. **7**(4), 411-427.