The Interconnectedness of Methodological and Pedagogical Innovation

Sarah Lewthwaite and Melanie Nind
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Structure

1. Defining innovation in research methods
2. Pedagogical innovation
3. Three points of connection
What defines innovation?

• It should be rooted in genuine attempt to improve some aspect of the research process (not just gimmickry or innovation for innovation sake)
• It is driven by complex social relations
• It can comprise developments to established methods as well as new methods

(Travers, 2009; Taylor and Coffey, 2008; Xenitidou and Gilbert, 2012)
Differences in definitions

• Applying only to new methods or methodologies or advances or developments of established methods (see Taylor & Coffey, 2008)

• Taken up by the wider social science community (Taylor & Coffey, 2008; Wiles et al) or not yet filtered through to the mainstream (Xenitidou & Gilbert, 2009, 2012)
Examples

• ‘Some innovations disappear as innovative methods because they have become part of the researcher’s standard repertoire’ (Williams & Vogt 2011), e.g., structural equation modelling, multi-level modelling, case study, grounded theory, CAQDAS are now normalised)

• But still under rapid development so when does innovation really end?
What drives innovation in methods?

- Value placed on innovation by research councils, funders, journal editors & reviewers, REF etc
- Emergence of complex new social situations, developments in disciplines, and resulting research questions
- ‘Flourishing of naturalistic, humanistic and mixed approaches’ (Williams & Vogt 2011): culture of pluralism
- Affordances of new technologies
- Filling methods gaps and responding to ethical concerns
What makes an innovation?

Primary conditions
- Dissatisfaction with existing methods/approach
- Identification of new phenomena
- Opportunity to develop something new
- A ‘need’ to be addressed
- A solution that is feasible/workable/accessible

Secondary Conditions
- Marketing of publications
- Training
- Evaluation response
- Academic legitimacy
- Uptake
- Duration
Innovation and Methods Pedagogy
The Pedagogy of Methodological Learning

• Lack of pedagogical culture
• Implicit / explicit nature of pedagogy
• Pedagogy as ‘hard to know’ (Nind, Curtin & Hall in press)

• Individuals may innovate, or claim innovation in their own practice, but ‘reality’ of innovation is controversial.
Characteristics of Methods Pedagogy

Making research visible: Connecting learners to research

Learning by Doing: This characterises the pedagogic activities that give students first-hand experience of research practice.

Reflection: The pedagogic approaches and activities that promote an understanding of the different ways in which research problems can be engaged with.
What drives innovation in teaching?

Fewer external drivers compared with methods innovation:

‘there’s very little reward for pedagogical development in most countries’ academic systems’

Chris Wild
What drives innovation in teaching?

The intrinsic driver of meeting perceived needs:

- Engaging changing and diverse student groups
- Challenges of working with new and shifting technologies
- Challenges of new and dynamic content
A Typology of Methods Pedagogy
<table>
<thead>
<tr>
<th>Vertical analysis</th>
</tr>
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<tbody>
<tr>
<td><strong>Approach</strong></td>
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<td><strong>Strategy</strong></td>
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<td><strong>Tactic</strong></td>
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<td><strong>Task</strong></td>
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W. Paul Vogt:

‘we tried to find non-technical, verbal ways of teaching research methods, so teaching regression analysis in terms of the questions that people doing regression analysis would be trying to answer, and teaching that in a class or two, and then having people read real research output and teaching them how to read it.’

‘I taught them [students] how to read the research, what it meant. It was more like teaching a foreign language than it was like teaching statistics; then took them to the lab, gave on hands-on experience, how to do it, and that was possible - especially with user-friendly software like SPSS.’
Visual Approaches

‘My main interest is in making it easier for people to see things and then being able to see data-related things quicker’

‘[I] first try to get people to a realisation that data can tell you something interesting’ ‘when their spark has been ignited then [I] go back and talk about things more holistically’.

‘[I] try to approach everything through things you can see, or metaphors which are often largely visual, and then backfill that with more technical things later if you need to.’

Chris Wild
iNZight  
https://www.stat.auckland.ac.nz/~wild/iNZight/index.php

‘A data analysis system with a particularly short learning curve’

Chris Wild
Innovation: methods crossing boundaries

‘In theatre we use the term “perceived similarity” meaning that if the audience sees something in the characters on stage that they can identify with, whether that be gender, ethnicity, problem, the audience is going to be more engaged with the performance.’ Hence in methods teaching, ‘I try to make things as relevant as possible, for my students.’

Johnny Saldana
How are methodological and pedagogical innovation interconnected?

fit

reflexivity

roles
• Filling methods gaps and responding to teacher & learner concerns
• Dissatisfaction with existing teaching methods/approach
• Opportunity to develop something new
• A ‘need’ to be addressed
• A solution that is feasible/workable/accessible
• Reflexivity on method
• Reflexivity on teaching
• Methodologist as learner of pedagogy
• Teacher as learner of methods
• Learner as teacher in pedagogic interactions
• Learner as resource and stimulus for change
Resources

http://pedagogy.ncrm.ac.uk

Teaching advanced research methods - NCRM quick start guide
http://eprints.ncrm.ac.uk/3746/

IJSRM special issue: http://www.tandfonline.com/toc/tsrm20/18/5


References


Contact:
Sarah Lewthwaite: @slewths
s.e.lewthwaite@Southampton.ac.uk
Melanie Nind: @m_nind
m.a.nind@Southampton.ac.uk