

The Pedagogical Content Knowledge of Social Science Research Methods Teachers and Why it Matters

European Conference on Educational Research
22 August 2017

Melanie Nind & Sarah Lewthwaite

@m_nind M.A.Nind@soton.ac.uk

The Pedagogy of Methodological Learning Project

<http://pedagogy.ncrm.ac.uk>

- How are advanced social science research methods taught and learned?
- How can methods teachers' methodological and pedagogical craft be most powerfully articulated?
- What distinctive pedagogical challenges arise in the methods classroom?
- How do teachers respond and build their pedagogical content knowledge?

Key concepts: Pedagogy is hard to know

- Not just what people do in teaching and learning situations but ‘what they perceive to be meaningful, important and relevant’
Nind, Kilburn, Luff (2015) The teaching and learning of social research methods: developments in pedagogical knowledge. *International Journal of Social Research Methodology* 18(5).
- ‘Never innocent’ Bruner (1996) *The Culture of Education*. Harvard University Press
- **Spanning what is specified, enacted & experienced**
Nind, Curtin & Hall (2016) *Research Methods for Pedagogy*. Bloomsbury
- **All contributing to it being hard to know**
Nind, Curtin & Hall (2016) *Research Methods for Pedagogy*. Bloomsbury

Key concepts: PCK

**Pedagogic
knowledge**

Pedagogic content knowledge

**Content
knowledge**

PCK

- Intersection of general pedagogic knowledge (broad principles that transcend subject matter) and content knowledge – *pedagogic knowledge specific to the subject matter*

Shulman (1987) Knowledge and teaching, *Harvard Educational Review* 57(1):1–23.
- Transforming subject knowledge into a form that is comprehensible to learners: knowledge of how to formulate explanations, how to represent content, ask students about it and respond to misunderstanding
- Active knowing or ‘craft knowledge’ - practical wisdom that interacts with rather than sits in opposition to theoretical knowledge, but tacit and situated

Importance of knowing PCK

- PCK is also hard to know - ‘teachers themselves have difficulty articulating what they know and how they know it’ (Shulman 1987, 6)
- It is dynamic – constructivists Cochran, DeRuiter & King (1993) refer to Pedagogical Content *Knowing*
- Knowing and discussing PCK means it is more open to sharing, developing, publishing
- Understanding our PCK is part of building pedagogic culture without which methods teachers rely on trial-and-error

Earley (2014) A synthesis of the literature on research methods education, *Teaching in HE* 19, 242–253

Research Design –

Combination of methods needed to:

- Elucidate PCK
- (Develop pedagogical culture
- Create a typology)

Ia. Expert panel interviews & online discussion: *Knowledge about action: PCK evident in narratives*

- To start the conversation with pedagogic leaders
Lucas & Claxton (2013) Pedagogic Leadership.
- To gain broad, conceptual insights into knowledge, views and experiences related to methods teaching



I b. Focus groups to deepen & broaden the conversation

- *Which approaches resonate with you?*
 - *Controversies & gaps*
 - *Probing pedagogic culture*
 - *Pedagogic resource issues*
 - *Is the concept of the typology meaningful?*
- FG1 University methods teachers
 - FG2 Mix of methods teachers
 - FG3 Teachers of methods using online pedagogies
 - FG4 Teachers of methods using online pedagogies

2. Video stimulated recall, reflection & dialogue: *Knowledge in action*

- To bring ‘informants a step closer to the moments in which they actually produce action ... [to] give answers of “I did,” instead of “I might have”’
Dempsey (2010) Stimulated recall interviews in ethnography, *Qualitative Sociology*, 33, 349–67
- To add a close up component
- Because of the ‘difficulties for practitioners in surfacing and articulating pedagogical values and beliefs’

Moyles et al (2002) Using reflective dialogues, *Early Child Development & Care* 172, 463–78.



3. Methods learning diary circle: *Knowing from a different perspective*

- A longitudinal lens
- An enriched conversation
- Co-production



Case studies: *Knowing in-depth in context*

- Face-to-face and digital pedagogic spaces
- Pedagogic innovation
- Methods innovation



Findings - PCK has its roots in:

- Experiences of learning/being taught/teaching
- Methodological experience
- Formal training, pedagogic beliefs & values
- Responding to challenges
 - From the learner
 - From the context
 - From the subject matter
 - From our own lack of expertise



Findings – PCK relates to knowing re:

- Classroom organization to meet pedagogical goals (e.g. group/pair work);
- Structuring content to manage the challenges (e.g. scaffolding, chunking, reverse engineering, back & forth);
- Pacing strategies (e.g. the ‘data sprint’);
- Pedagogical starting points (data vs theory, craft vs art, teacher’s vs students’ experiences);
- Pedagogical hooks for connecting students to research methods, getting them interested and confident.
- Where students struggle with the subject matter
(see Nind & Lewthwaite, 2017, Hard to Teach, International J of Inclusive Education)

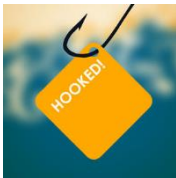
PCK concentrated in how to teach with, though & about data

- Affordances of using learner data
- Affordances of using teacher data
- Value of authentic data
- Value of immersion in data
- Value of doing things with data



Power of data as a pedagogic hook

- **Seeing the relevance:** ‘we’re doing it in order to generate data that can tell us things about the social world’ (Amanda Coffey)
- **Passion more than chore:** ‘what I think more and more is try and get them interested about data itself and things that they can see in data ... when their spark has been ignited then go back and talk about things more holistically’ (Chris Wild)
- ‘once we were in it, it was very animated and it took off’ (learner, CS1)



Findings – PCK re pedagogic hooks

- **Entry point** – data from very early on; start with it rather than build up to it
- **Action** – doing things with data, experimental writing, getting hands on in the lab
- **Experiencing data** – gaining experience, sharing it, reflecting on it, going behind the scenes
- **Dialogue** – about who we are and what we want from methods and data; about standpoints



Appreciating data

- ‘a sense of what might count as qualitative data ... what is the data with qualitative research? And how do we render data meaningful?’ (Amanda Coffey)
- ‘moving away from a certain understanding of data as like this thing that exists out there, we are like looking into our everyday lives and sensations and encounters and creating data from what already exists in our lives’ (Alisa)

Using data to communicate concepts

- John MacInnes – stimulating the statistical imagination, importance of ‘anything that gets students interested in data’ and in evidence
- Pauline Leonard – teacher describing her own ethnographic experiences in detail
- Chris Wild - visualizing data and ‘being able to see data-related things quicker’



Using data to experience the method

- Johnny Saldana – embodying data, reading it aloud
- Alisa, CS1 on writing ethnographic vignettes: students are ‘making something, which is the writing of something ... sharing it with the others ... it is pretty much a craft, what they’re doing, so it’s apprenticeship in the craft’
- Sharlene Hesse-Biber - taking responsibility for data decisions
- Malcolm Williams – ‘flying time’
- Many - ‘getting your hands dirty’

Data as a vehicle for reflection

- Yvonna Lincoln - reflecting on what lens has been used on the data
- Sharlene Hesse-Biber - 'methods should not be disembodied, and should not be taught as disembodied entities': data connect the learner to the method and context



Conclusion

- So, in terms of PCK, we see how methods teachers transform /method knowledge into a form that is comprehensible to learners through working with data in refined, careful ways.
- We know from other work on the PCK of science teachers that development of PCK is supported both by finding ‘activities that work’ and by discussion.
- Please discuss!!



Resources

Project website:

<http://pedagogy.ncrm.ac.uk>

International Journal of Social Research Methodology
special issue: <http://www.tandfonline.com/toc/tsrm20/18/5>

Lewthwaite, S. & M. Nind (2016) Teaching Research
Methods: Expert Perspectives on Pedagogy and Practice.
British Journal of Educational Studies 64(4): 413-430.
<http://dx.doi.org/10.1080/00071005.2016.1197882>