

Exploring teachers' professional learning for designing and making the curriculum

Curriculum making and professional learning: interactions in teacher practices

Eleanor Hotham, doctoral candidate, SIOE.

Making the Science curriculum active: teacher knowledge and expertise

Robbie Campbell, doctoral candidate, SIOE.

Practice knowledge and mentoring: a realist analysis of professional learning in mentoring others

Richard Pountney, Postgraduate Taught Portfolio Lead, SIOE.

Knowledge in Education Research Special Interest Group

<https://blogs.shu.ac.uk/kiERG/>

Practice knowledge and teacher mentoring: a realist analysis of mentoring others

Richard Pountney

- A work in progress (Coldwell and Pountney, 2019)
- Looking at PD programme evaluation and underlying perspectives
- Outlining realist philosophy and two applications:
 - Realist evaluation
 - Social Realism
- Application to practice: mentoring
- Discussion



- Much of the academic literature on Professional Development takes a **constructivist stance**.
- Coldwell and Simkins (2011) and Boylan et al (2017) suggest 'path model' approaches often have an undeclared **positivist position**.
- **Realist perspective**: Pawson and Tilly (1997) - constructivist approaches pay too much attention to the specifics; positivist approaches provide clear predictions of outcomes but flatten out variations in context
- We need an alternative...

Three domains of reality

	Domain of Real	Domain of Actual	Domain of Empirical
Mechanisms	X		
Events	X	X	
Experiences	X	X	X

The **EMPIRICAL**: Events that are actually observed and experienced

The **ACTUAL**: Events (and Non-Events) that are generated by the Mechanisms

The **REAL**: Mechanisms and Structures with Enduring Properties

Critical Realism: Some key elements

- A focus on **causation**: interactions between actions, structures and ideas (cultures) create deep change
- The persistent, patterned but changing nature of reality; **interventions** [like PD programmes] are sets of resources introduced into pre-existing social situations
- The concept of **mechanisms**, operating in context to create - in some circumstances - this emergent change
- Therefore context is crucial
- So the job of the evaluator is to seek out **CMO combinations** that are most useful

Social Realism (SR): towards a methodology

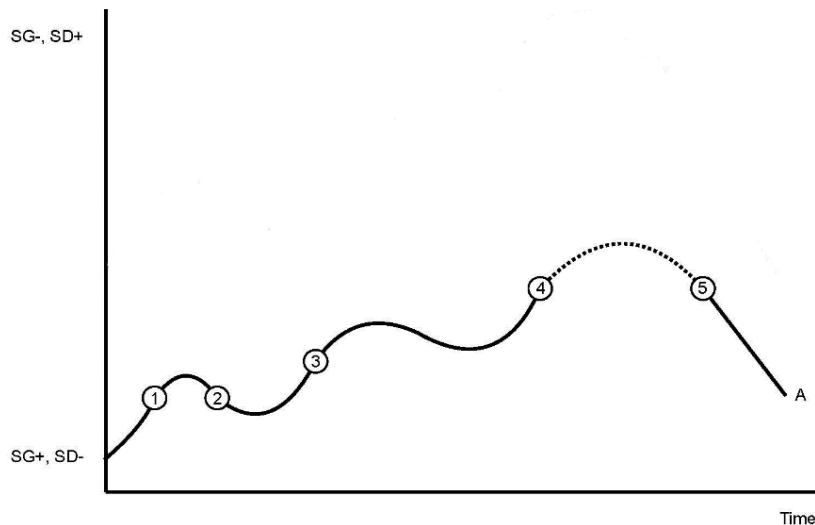
- *'An ontology without a methodology is deaf and dumb; a methodology without an ontology is blind'* (Margaret Archer, 1995: 28).
- Social realism as a 'coalition of minds' (Bourdieu, Bernstein, and Maton) (Moore and Maton, 2013)
- Knowledge as both ontologically real and epistemologically relative
- Avoids the epistemic fallacy of *'collapsing ontology with epistemology'* (Bhaskar, 1993, p. 397).
- Knowledge is understood to be a product of its time and of its context, and thus historically contingent.

- Sees **PL as an intervention** and professional practice as a knowledge practice and a discourse
- Contextual features are described in terms of **knowledge codes** and of **knowledge structure**.
- Practice is seen as emergent, where identification of code shifts and clashes reveals a **theory of change**.
- The underlying basis of knowledge and curriculum is seen as subject to the '**pedagogic device**', the 'symbolic ruler of consciousness'.
- Develops '**external languages of description**' (translation devices) that enable theory to talk to data and vice versa to 'think the yet to be thought'.

- Provide **resources** for mentors' professional development, to enable mentors to become knowledge builders and sharers, collegially (Pountney and Grasmeyer, 2018)
- Acknowledge that Professionals self-evidently have and need both **specialised knowledge** (know that) and **practical expertise** (know how) (Young and Muller, 2014)
- Encourage '**parity of participation**' (Fraser, 2005: 73) that overcomes forms of cultural inequality and institutionalised hierarchies of cultural value that deny mentors the requisite standing'.
- Limit **forms of injustice**, such as '*judgementoring*' (Hobson, 2016), that are otherwise tolerated because they allow entry to profession
- Promote the **transformative potential** of mentoring, beyond self-efficacy, to allow alternative epistemic positions and authorities to exist (epistemic justice)
- Defend **professional autonomy** so that mentors have a say in *what counts* as mentoring knowledge and expertise, and in *who says what counts* (Pountney, 2014; under review)

- a **programme of enhancement** of teachers' mentoring practices (2017-19) in South Yorkshire in the UK, with 800 teacher participants.
- STEM Teacher Mentoring (Wipro)
- two broad types of research method, extensive and intensive (Sayer, 2000)
- focus on individual **agents in context**, asking "what produces change?" (Easton, 2010)
- **bounded** by (inter/intra)organisational relationships and asking "what caused the events associated with the phenomenon to occur?"
- abstracts from structures and relationships to enact the **basis** of practice as well as its focus.

Professional knowledge for mentoring

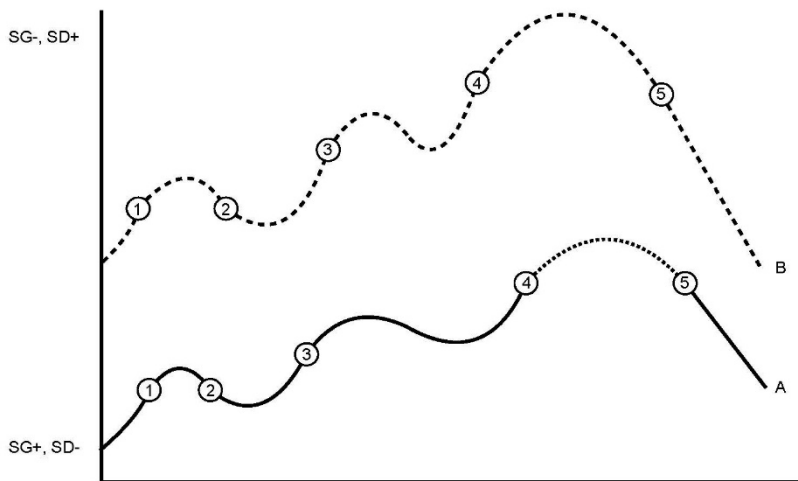


A: Exchange between mentor and mentee
 SG: Semantic Gravity SD: Semantic Density

Process / Stage	Exchange
1. Describe what happened	<p>Mentor: 'We are going to talk about your last lesson, what I would like to do is go through what you think happened, talk about your strengths and talk your areas of development. ..., how did you think the students made progress, is it the progress you expected, and what is your resumé of what happened?'</p> <p>Mentee: 'I don't think it went particularly well, and I don't think the class made as much progress as I would like ... I feel they are very low in confidence, they are low ability and I feel I didn't properly scaffold, and for that reason I think I am a little bit disappointed'</p> <p>[mentor asks what went well]</p>
2. Ask about a critical incident and responds to mentee's analysis	<p>Mentee: 'When they didn't understand some of them did ask questions and say 'Miss, can you explain a little bit more...''</p> <p>[mentor confirms her version of what she saw and the challenging nature of the class]</p> <p>Mentor: 'The thing I was especially impressed with was that, although the lesson didn't go according to plan you actually noticed that and tried to deal with it. I really liked that you picked up that the students were struggling [shows the mentee the lesson materials] ... and I feel that they were a little confused by the language ... what do you think happened after that?'</p>
3. Direct the mentee towards future action	

Pountney (2019)

The specialisation of mentoring knowledge



A: Exchange between mentor and mentee

B: Exchange between senior mentor and mentors

3. Abstract and model the problem

4. Elaborate the model using specialised language (metaphor)

5. Return to problem and action plan

Mentor 2: *'Starting from the perspective that the trainee is potentially a talented future teacher, because of the systems of protocols that you as a mentor, and as a school are in action, if you then want to stretch and challenge them, by taking the shackles off, doesn't make sense at all ... our role changes from being from a driver and director to being a facilitator in the acting out, they are now the doer, in the complete sense, but it is that unconscious behind the scenes, pulling of the strings ... and we need to protect them'*

Mentor 3: *'For me personally its putting them in the driving seat ... to be actually, the thinker and the doer and the deliverer, because that's the reality of what we do every day... and it can be stabilisers on, or stabilisers off, and that's where we come in, in our own judgement, but that has had the biggest impact, and you can tell a lot about a teacher's capacity if they can do the juggling with many things. We are often the 'mayor' of our classrooms, that's where the practice is, and that's where the majority of their learning is ...'*

Senior Mentor: *'So what I am hearing is, push them out of that comfort zone, and saying to them, look you can be even better tomorrow than you are today'*

Pountney (2019)



**Sheffield
Hallam
University**

Sheffield
Institute
of Education



The Programme in Action

Fellows: early career teachers of STEM

Mentors: mid-career, experienced teachers of STEM

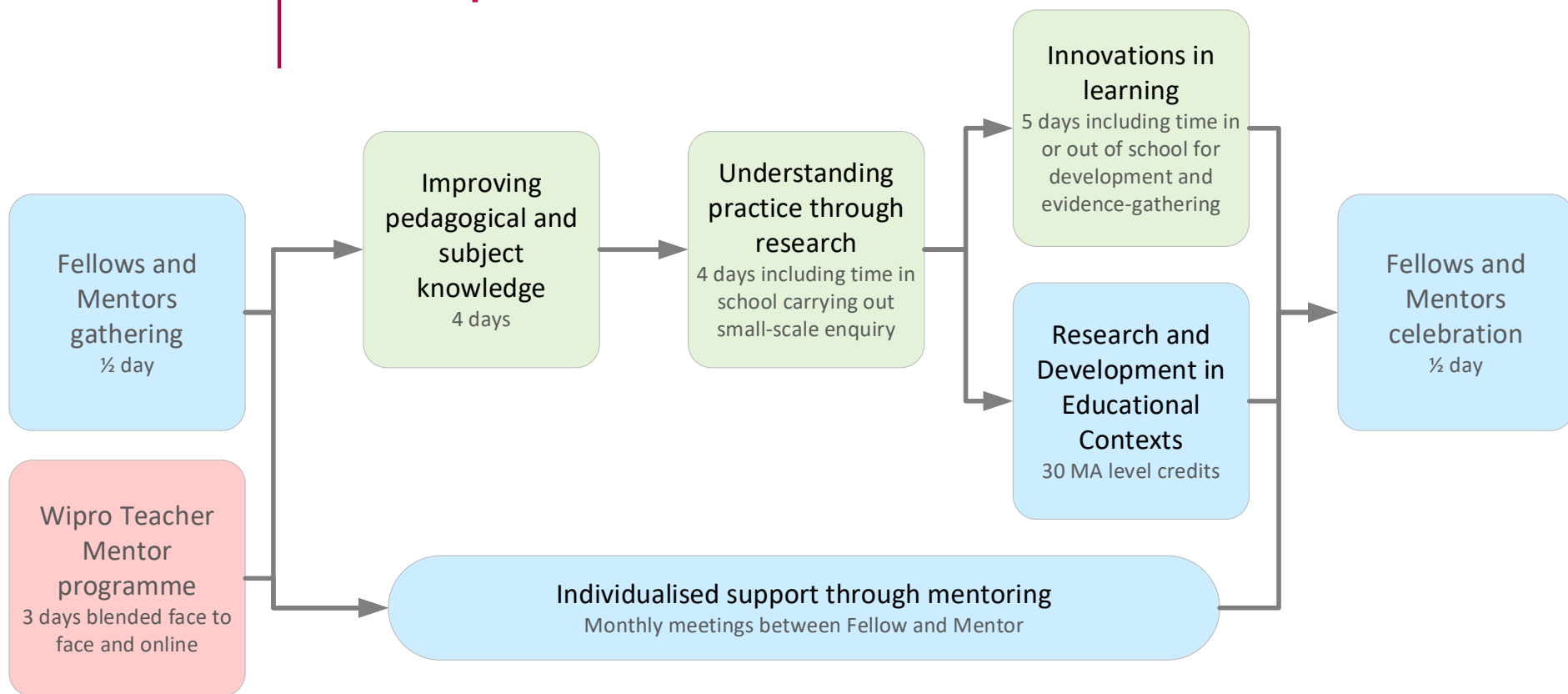
2019-20: 10 Fellows/Mentors (secondary)

2020-21: 17 Fellows/mentors (primary and secondary)

School Bursaries (£3,500 per teacher)



Multiple strands of professional development





| Mentoring as joint action - Impacts

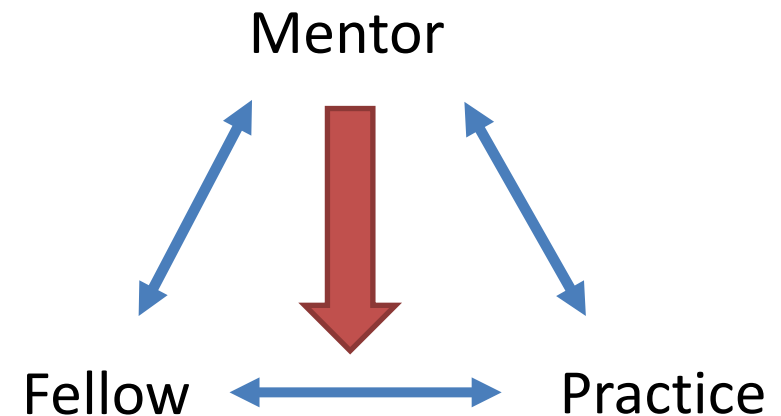
- » **Mentee's improvement of Subject Knowledge** relating to content specific to course students were taking.
- » **Mentee gained confidence** in delivering topics that are often hard for students to grasp, or reviewing teaching techniques and pedagogy, including doing things differently (stretch) or trying new things (challenge).
- » **Improvement in mentoring** – The ability and time to try many techniques and skills within mentoring to find out what worked.
- » **Reflective of own practice and reciprocal** – working with a mentee allows mentor to be reflective of their own practice, critically, by making practice explicit, and learning from the mentee's ideas and own practice.
- » **A community of expert mentors**– sharing experience with other mentors guides and supports mentoring practice.
- » **Provides progression** – fellows become mentors, mentors become learning coaches



Theorising mentoring as powerful professional practice

'How can disciplinary knowledge and other external knowledges be brought together with professionals' reflective practice and practical theorising in professional arenas to produce really powerful professional knowledge and learning?'

(Whitty and Furlong, 2017 p.49)



Joint Action Didactic Theory (Hudson, 2016)

Discussion (1): our propositions

Realist Evaluation	Social Realism
<p>PDL as intervention played out in 'open' settings in complex social systems, where context affects outcomes</p>	<p>PDL as an intervention in knowledge practices and discourse where recontextualisation provides a theory of change</p>
<p>Examines webs of causal processes which in combination generate the outcomes</p>	<p>Examines contextual features modulated in terms of knowledge codes and knowledge structure</p>
<p>Makes explicit how various contexts interact and affect the outcomes of an intervention via the triggering or inhibiting of key mechanisms</p>	<p>Reveals underlying basis of practice, subject to the 'pedagogic device', and how they are produced, recontextualised and reproduced</p>
<p>Research is theory-led and uses tools that support the analysis of the complexity inherent in the system.</p>	<p>Research develops external languages of description (translation devices) that enable theory to talk to data and vice versa</p>
<p>Provides the ontological basis of examining PDL practice</p>	<p>Combines with RE to provide a methodology for examining practice</p>

Value?

- A clear but complex focus on causation, avoiding simplistic 'process-product' (Opfer and Pedder, 2010) conceptualisations.
- Foregrounds causal mechanisms, and lays these out in detail.
- Brings together the extensive, often meso and macro level perspectives on PD programmes from RE with the intensive, micro level focus on knowledge practices of social SR, thus addressing limitations of each.
- wider applicability within education beyond PD programmes to the study of the wider practices of teachers

Questions and comments...

Is our 'diagnosis' of the problem correct?

Does our solution work for you - is it clear? is it right?

what is wrong or missing?

Is our application helpful?