

A Question of Knowledge(s):  
Occupational Therapy Students'  
Experiences of Problem-based Learning

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“A students I think we need to be taught anatomy; we don’t get that on a PBL course”

# Knowledge and PBL

- What knowledge do occupational therapy students think they need?
- How do students on a PBL programme determine what knowledge is important for occupational therapy practice? Who or what influences this decision?
- Do OT students prioritise different types of knowledge?

# Why is this important?

- Knowledge (and our view of it) shapes our identity as learners.
- Previous PBL research has overlooked knowledge, as a consequence both of the constructivist principles that underpin PBL, and the ontological orientations of researchers.
- PBL research on the student experience has focused too much on the ‘story of individuals’ this can result in solipsism- where free floating narratives are seemingly divorced from the **structure** of the PBL programme

# What is occupational therapy (OT)?

- OTs use ‘occupation’ or activities to promote health and wellbeing and to help people regain/maintain independence in all areas of their daily life as a consequence of ill-health or impairment.
- OT developed out of philosophies of practice, ways of being e.g. occupational focused, client centred and holistic. A basic belief in the importance of activity for good health.

# Development of OT

- OT expanded during the early part of the 20th century, and OT began to be used to *rehabilitate*, e.g. soldiers from both wars, or as a *diversional* technique, e.g. within psychiatric hospitals.
- In the UK creation of the NHS established OT within the health sector, but under the patronage of doctors e.g. CPSM
- From 1960s onwards increasing dissatisfaction with OTs association with reductionistic medicine.
- Professionalization of OT, e.g. Health Professions Act 2001
- Growth of a research culture in to occupational therapy and occupation

# Why use PBL for the Education of OTs?

- In the UK, OT education comprises three year (two year post graduate) degree programmes,
- OT courses in the UK follow standards set by COT and WFOT. These allow for much freedom in delivery but specify some content e.g. medicine, anatomy, theories of occupation, as well as 1000 hours of practice placement
- OT and PBL philosophy share similar characteristics e.g. client centred /student centred, process orientated with context specific knowledge
- Cardiff course uses PBL from the outset and throughout the three years. Each year has a particular theme i.e. assessment, planning and intervention, evaluation

# Theoretical framework

- Bernsteinien framework- Bernstein's project spanned 50 years both in the fields of socio-linguistics and sociology
- In education he was primarily interested of the wastage of working class potential.
- Previous to Bernstein education was seen as a relay device- the structure of educational systems in bringing about class/ race / sex differences was not central to analysis
- Bernstein's analytical tools allow the researcher to explore issues such as the relationship between education and labour markets (macro) to classroom interaction (micro)
- Viewed as a 'harbinger of a new synthesis'

## Framework contd.

- Bernstein= ‘conceptual fog’ his ideas are slippery to hard to grasp- his influences are many notably Durkheim, but also Marx, Douglas and Foucault to name a few.
- For me, Bernstein is a **structuralist** and a social realist, his thoughts on the structuring of pedagogic transmissions and the structure of knowledge (s) was the most useful for my investigation

# Framework contd.

- Bernstein's concepts were used both heuristically and abductively (Coffey and Atkinson 1996)
- 'Classification' (+/-) and 'Framing' (+/-)  
(Rhetorical representations of pedagogy)
- Strong classification = 'collection code'
- Weak classification = 'integrated code' (i.e.PBL)
- 'Recognition Rules' (associated with 'classification')
- 'Realisation Rules' (associated with framing)

## **Framework contd.**

- Differentiating the structure of knowledge:

‘Vertical’ and ‘Horizontal Discourse’

# Sample/Method

- Twenty PBL students ; entering the PBL ( full-time) programme via different educational pathways: 10 from access/vocational courses in health and social care (integrated code). 10 with traditional A level qualifications (collection code)
- Semi -structured interviews exploring students' previous forms of learning, their views of knowledge, their experiences of PBL and knowledge in relation to group work, placement assessment etc.

# Analysis

- Comparative analysis
- Codes and concepts were built up from the interview transcripts- ‘contrastive rhetoric’ was a key analytical tool both ‘within’ and ‘between’ the sample groups.
- Findings focused on the transition between the students’ previous educational pathways and their early (first year) experiences of PBL.

Some findings....

## ‘Classification’ and ‘Framing’ of Previous Pathway

*A levels were split into modules, which is something that I liked about it actually, because you had a structure...it was well organised but you were spoon-fed the information by the teacher* (Bronwyn, A level student)

*The health and social care was a foundation block for OT, it looked at things like physiology, communication and healthcare which is a major issue when you are out there in practice. It considered development and human development which OTs are concerned with* (David, AVCE)

# ‘Recognition’ of PBL (integrating knowledge discourse)

*There are lots of girls on the course [PBL programme] who have done some fantastic things, they have worked in other countries, they have gone out to orphanages and things, it’s lovely to hear what they’ve seen and done. Also, it can help you, it can give you a little bit of an insight, a little bit of information into what is what ( Kate, Healthcare student)*

*When I started [PBL group work] I thought other people might not bring back as good as information as me, so it would be then up to me to go and do the research that they had been given as well as my own. Basically if people bring information back and it’s just from them, what they think, or what they’ve seen, then you are not going to need it.. are you? ( Harriet, A level student)*

## Anatomy ‘vertical discourse’

*I haven't had a problem with studying anatomy or conditions on the PBL course I did a lot of applied anatomy in my previous course and I found it is something that you only use when you need it. (Anna, Healthcare student)*

*With anatomy you need to build from the basics and that's the downside of PBL. I don't teach PBL but personally I couldn't see why why we didn't have anatomy up front. (Mia, A level student)*

## Anatomy 'Vertical Discourse'

*I think people were happy to go off from the group, research stuff, come back and feedback what they have found. But I think that learning stuff like anatomy in this way could lead to fragmented knowledge (Gareth, A level student)*

# ‘Realisation Rules’ and Assessment (Assignments)

*When I came to uni, I didn't know what 'analysis' and 'synthesis' meant. I was used to learning about human development and applying that in practice. Part of an assignment might be to observe a child's handwriting skills but you knew how to do that. It was clear what you had to do to get a 'C' grade and the depth you had to go to to get an 'A' grade. (Nerys, Healthcare student)*

# ‘Realisation Rules’ and Assessment (Assignments)

*When I got the essays back in the first year, the content seemed to be there, but I guess you could say there was no argument. There were not enough academic sources. There was none of this ‘so and so said this and so and so said that’, you know, opposing views. That was one of the only things that I really struggled with when I started the PBL course ( Kate, Healthcare student)*

*I think my A level in English literature taught me how to analyse and critique...I feel like I had a head start because of that. I have always done well with essays (Paulette, A level student)*

# ‘Realisation Rules’ and Assessment (Exams)

*Exams rely on recall and that’s my downfall really. I’m hopeless at exams and they tend to bring my grades down, I think when I go out on placement that’s when I can show that I’m a really good student* (Tara, Healthcare student)

*I would say, I’m quite an academic person and I like exams. It goes back to being lectured at I suppose and constantly having exams throughout my whole life. I guess I’ve been trained to perform well in exams.* (Joanne, A level student)

# ‘Realisation Rules’ and the Viva

*The viva is about the knowledge you get from placement.*

*It’s stuff like the knowledge of the local areas, to an extent what is out in the community; things like being able to use a bowls group, the sort of day to day OT things, like knowing you can go to the Red Cross. ( Anna, Healthcare student)*

*I think the viva is about what you do, it is about putting things into practice and being an OT (Eve, Healthcare student)*

# ‘Realisation Rules’ and the Viva

*In my first viva I think I over-compensated on the knowledge stuff, focused on the condition at the expense of synthesis of what goes on in the OT setting. (Gareth, A level student)*

*In the first year the whole concept of the viva was something new, and I was really trying to ‘kick in’ what was wanted from it. I think I over complicated it and focussed too much on the academic side of things. (Paulette, A level student)*

# Placement ('horizontal knowledge')

*Placement provides the practical of working with others, and things you can never learn in college like how to order equipment; the practical day to day working of the system like how you are going to deliver the best service to your clients. (Karen)*

*With placement it's the 'hands on stuff' really. It's the client contact and actually working as an OT (Joanne)*

## Case studies ('horizontal discourse')

*We have learned that it is important to understand what the occupational therapist does in practice. In approaching a case study, I might speak to an OT based in a similar setting. I would want to concentrate on what an OT would do to help this person get back as far as possible to his occupations and everyday routines. Because as OTs, that's what we are supposed to be looking at. (Vicky)*

## PBL Philosophy Discourages ‘Vertical Discourse’

*In the first year, some people including myself went to a staff member and said, ‘we want to learn about this, or we want to learn about that’. And the staff member said ‘why? They said, if you can justify why you need to know it then we’ll include it into the OT course. None of us ever bothered to suggest anything again (Gareth)*

# Recommendations

- Need for an **explicit** (visible ( Bernstein) ) curriculum so all students recognise that PBL integrates different forms of knowledge
- Assessment methods should be made more explicit, so students understand what is expected of them from the different assessment methods used on the programme
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