

Title

The limits of psychologistic approaches in investigating faculty's pedagogical constructs

Author's name and affiliation

Joelle Fanghanel

Educational Development Centre

City University

London

EC1V 0HB

Contact for discussion and feedback:

j.fanghanel@city.ac.uk

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Introduction

In this paper I focus on a number of methodological issues related to research on pedagogical constructs in higher education. My stance is that the psychologistic dimension is privileged to the detriment of context. Bringing in the socio-historical dimension afforded by theories taken from social practice literature enables the research to study lecturers pedagogical approaches with reference to the context in which they work, rather than simply as an individualistic psychologistic action focusing on mental processes. From a theoretical perspective, I have found it particularly useful to foreground the difference highlighted in Leontev's work between 'action' and 'activity'. Leontev's identified three levels to describe activity – 'activity' at the collective level relates to a collective motive, 'action' at the individual level relates to individual aims and 'operation', which describes the instrumental conditions and the tools at hand within the activity. In this paper, I will seek to highlight the benefits of presenting teaching as an activity rather than an action.

Context for the study of teaching constructs

Psychology-oriented studies of learning are concerned with cognitive structures and mental processes for transforming information such as perception, memory, processing and recall, and beliefs about knowledge. These studies can be encapsulated in three metaphors:

The delivery metaphor: knowledge is perceived as a body or an object, and teaching and learning as a transmission-reception activity, and researchers are therefore interested in the process that facilitates this transmission. Information-processing approaches produce conceptions of cognition that are very close to the computer analogy whereby information is inputted, organised, stored and retrieved.

The facilitator metaphor: constructivist approaches concentrate on the way individuals construct meaning using experience and guidance. Central to

constructivist approaches is the work of Vygotsky which redefines the role of the teacher, through the famous zone of proximal development. Carl Rogers in particular showed that the concept of 'facilitation' was more suited to a changing environment than were traditional views of teaching (Rogers, 1969).

The knowledge metaphor: work on teachers' epistemologies focuses on knowledge beliefs. Much of which is based on Perry's (Perry, 1970) seminal study carried out amongst Harvard's Freshers on epistemic development from dualistic views of knowledge to more sophisticated, relativistic views.

These approaches are premised on the existence of a causal link between thoughts and actions, or beliefs and actions which accounts for decision making. The aim of this research is therefore to investigate thinking in order to influence consecutive actions. Much of this research is based on the novice-expert paradigm; expert teachers are shown to have a high level of competence in processing information (Olson, 1988, 168). Cognitive psychology research in the tertiary sector includes studies on teaching efficacy and on teaching excellence, associated with work on reflective practice (Hativa & Goodyear, 2002 for an overview of current research approaches within this stream).

A prevalent paradigm in higher education: conceptions of teaching

An important paradigm in the tertiary educational environment has been the work carried out on 'conceptions of teaching'. This body of research has become very influential in the education of new lecturers in the UK. It has reached a striking degree of consensus around two main orientations for teaching: a student-centred approach vs. a teacher-centred approach to teaching. Within it, two slightly different research approaches prevail. One is clearly framed by phenomenographic approaches (Dall'Alba, 1991; Martin, Prosser, Trigwell, Ramsden, & Benjamin, 2002; Marton, 1994; Pratt, 1992; Prosser & Trigwell, 1999; Prosser, Trigwell, & Taylor, 1994a; Ramsden, 1992). For those researchers, 'conceptions' are capturable through analysing

the relation between subject and object (Marton, 1994, 30), at the level of how a lecturer is oriented towards teaching. This body of research identifies a number of possible orientations by analysing how approaches differ from each other. The other set of studies belongs in a less explicit theoretical framework and is more psychologistic in its approach focusing on the developmental or beliefs dimensions of teaching conceptions (Dunkin, 1991, 2002; Dunkin & Precians, 1992; Entwistle, Skinner, Entwistle, & Orr, 2000; Entwistle & Walker, 2002; Fox, 1983; Kember, 1997; Kember & Kwan, 2002; Samuelowicz & Bain, 1992, 2001).

Consensus on conceptions

Studies on conceptions of teaching have reached a consensus on the fact that there exist a finite number of categories (or 'categories of description' for phenomenographers) to account for the different ways university lecturers conceive of teaching. A pattern emerges from 'transmissive' conceptions where teaching is seen as imparting of information, to 'facilitative' conceptions where the lecturer is concerned with promoting conceptual change in students. (Prosser & Trigwell, 1999). Although there is some debate amongst these researchers as to the number of categories, the location of some of them in relation to the teacher-centred vs. student-centred poles, and the possibility – or not – of having a transitional category of 'facilitating learning' (Samuelowicz & Bain, 2001), this body of the research has clearly established a consensus around the existence of a number of conceptions spread on a continuum between transmissive and facilitative conceptions, and the related teacher-centred vs. student-centred approaches to teaching. An important contribution of this body of studies is to have engaged with lecturers' conceptions, rather than focusing on teaching skills or on explanations of behaviours, decision-making, and thinking processes, as is the case in strictly cognitive studies. The emphasis on experience is the point of departure of phenomenographic studies, which indeed is a critical shift in perspective.

Limitations of psychology-oriented studies

Context is understated

The methodological stance adopted in these studies maintains teaching and learning outside the reality of practice. The emphasis on the relational aspects of conceptions of teaching and learning in particular, tends to present them as related – but separate - activities and does not fully account for the dynamics of the activity, concentrating on the product. 'Conceptions' of teaching show the ways in which teachers describe their experience of teaching; this remains the intellectualised expression of a restricted, highly situated, specific experience.

Context is at best, ill-defined, at worst highly restricted. It is perhaps possible to capture context through their description of the 'situation' in which the teacher finds him/herself, which is defined as 'the physical setting, the departmental and institutional context, and very importantly, the students' (Prosser & Trigwell, 1999, 159). This limited spatial apprehension is highlighted by a phrase such as 'when teachers enter teaching and learning contexts' (Prosser & Trigwell, 1999, 151). Prosser & Trigwell consider that a typical teaching situation would include as components: the degree of control over what and how they teach, class sizes, students' ability including language background and gender, how valued teaching is in their department, and their own academic workload (Prosser & Trigwell, 151). If a context is to ever encompass the political or ideological dimensions – Marton for example indicates that 'the way a school is organised, schools are built and how they are run, might tell us a great deal about how knowledge is conceived of in a particular society' (Marton, 1996, 182) – this is not explicitly exploited in the phenomenographic studies.

Other methodological limitations

Essentialism and reductionism

Phenomenography proposes to describe variations in the ways individuals experience a phenomenon, the relation amongst these variations (the

structural aspects) and the variation in the ways the object of study is experienced (the referential aspects). In this perspective, the outside world does not exist distinctly from the individual and can only be perceived in its relation to the individual. The object is not to describe the views of particular individuals, but to 'map' the forms of thought of respondents (Uljens, 1996, 119). These categories are therefore 'neutral' (ibid), detached from their temporal and situational context and can be perceived as an *essentialised* form. This essentialist approach however enables phenomenography to circumscribe and manage experiences - phenomena can only be experienced 'in a limited number of qualitatively different ways' (Marton, 1996, 177) and the outcomes space represents their sum. This guards phenomenography from the dangers of relativism.

Research agenda and standpoint

Researchers in this tradition present their work as being an enquiry of the 'second order' (Kember, 1997, 258), rather than a first order researcher perspective, and claim to be describing a phenomenon 'as described by others' (Trigwell, 2002). However, the categories obtained can be seen as a second order *representation* or *interpretation* (my emphasis) by the researcher of first order respondents' statements, in other words they could be as Uljens puts it (Uljens, 1996, 125) 'an explication of the *researcher's* experience of the data' (original emphasis) – an approach which would contradict the aim of the phenomenographic enterprise to objectively capture internally related experiences of a phenomenon.

The researcher is presented as an objective agent, and invited to 'maintain an open mind' (Akerlind, 2002), 'bracket' his/her prior conceptions or 'appreciate their effect' (Francis, 1996, 41) while 'maximising subjectivity in reports of experience' (Francis, 1996, 38). Uljens claims that while bracketing is impossible to apply to any empirical science, prior understanding of a subject matter can be suspended in order to understand somebody else's argumentation (Uljens, 1996, 122). To ensure accuracy of the dialogue and

grant credibility to the categorising decisions, ambiguities and contradictions should be cleared during the interview (Francis, 1996, 41). The status of the researcher in collecting and reporting the findings is further confounded by the issue of the status of the respondent's utterances.

Status of data

Even if one discards the reductionist effect of the process described above – which may also exist in other forms of research designs – there remains a degree of vagueness about the status of the data retrieved through interviews. There is no reality check concerning the 'front of the mind' nature of the respondents' responses, and no comparison with reality itself as in this philosophical perspective, there is no reality other than the one being experienced. This is a serious issue when the researcher is trying to get at teaching practices. In terms of validity, this is compounded by the fact that phenomenography is concerned with describing the experience of a phenomenon. It is therefore essential that the mind of the respondent be focused on specific situations (Prosser & Trigwell's in their 'Approaches to teaching inventory' for example asks that the respondent focus on a specific context to answer the questions). In reality it is very difficult to check that the mind of the respondent is focused on the object of study as defined by the researcher.

Language

Phenomenographic studies rely a lot on semantics to collect and analyse data. This can be problematic particularly where they involve questionnaires which include potentially ambiguous meanings (eg. '[students]' changing understandings', 'I structure this course to help students pass exams', 'I encourage students to restructure their existing knowledge, 'conceptual understandings' etc in Trigwell's 'University teaching inventory') and qualifications whose meaning can be subjective (only rarely, sometimes, about half of the time, frequently, always). They also rely on semantic distinctions for the outcomes space based on terms that are open to

interpretation such as 'teacher's knowledge', 'concepts of the syllabus', 'develop conceptions' or 'change conceptions'. In spite of this reliance on linguistically defined categories, and subtle linguistic differences in the choices offered to the respondent, phenomenographers appear not to problematize language in any way and not to take account of discursive practices, seemingly assuming some kind of stability in meaning. This is a weakness that is partly acknowledged by Säljö, who while recognising worthwhile exceptions states that there is a need to establish 'a joint definition of what is being talked about' (Säljö, 1996, 24) that 'phenomenographers alienate individuals from their own *utterances* by reducing these into *statements*' (Säljö, 1996, 25) (original emphasis). This silencing of discourse in phenomenographic studies stems from its theoretical framework that takes a highly situated view of context, understating the cultural framework within which academics operate.

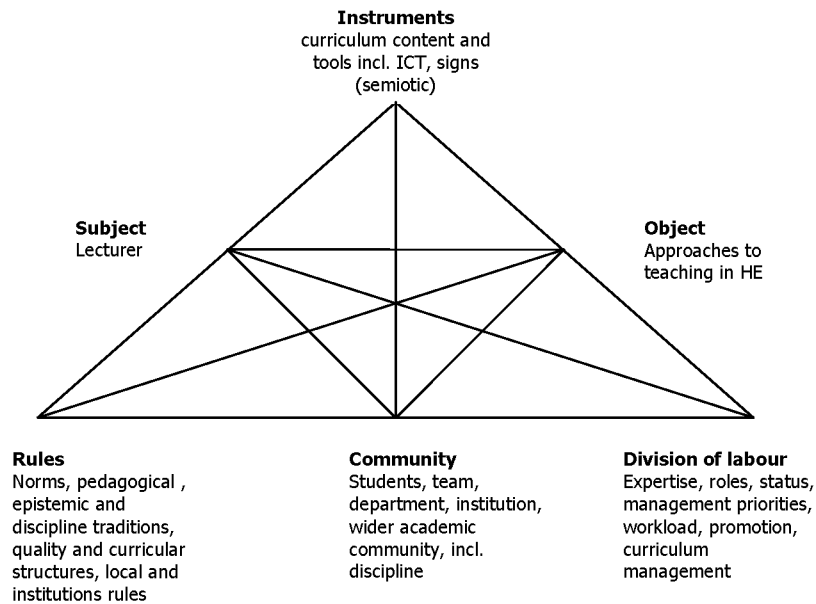
As a result of this approach, the categories of conceptions on which a consensus has been reached by most researchers are very neat but do not account for agentic behaviours, and positioning adopted by university lecturers as a result of 'identification' or 'resistance' to values or ideological frameworks. Issues such as power, room to manoeuvre, pressures on university lecturers to teach certain skills and behaviours which do impact on their experience of teaching in the university sector are not explored. A socio-historical theoretical framework is more to capture those factors and establish how they are distributed within the teaching and learning systems in which university teachers practice.

The socio-historical approach

Using activity systems theory (AST)

While phenomenography might be seen as having gradually evolved from methodological to theoretical concerns, activity systems theory emerged from the theoretical framework of activity theory, devised for analysing activity, and has gradually developed into a method of enquiry yielding practical

solutions to problems, particularly under the impulse of Yrjö Engeström for whom AST provides a historicist perspective on a situation or an experience, by which he means that it goes 'beyond the confines of individual biography' and in which the unit of analysis is 'a collective activity system' (Engeström, 1999, 26). Activity systems theory emanates to a large extent from the work of Vygotsky's students, in particular Leontev's interpretations of Vygotsky's theory of activity.



Approaches to teaching system, adapted from Engeström (1987, 78)

Methodological benefits

- In this framework teaching is seen as an activity rather than as an individual action, taking account of the context in which it takes place. In this perspective, the multitude of relationships that can be identified as influencing pedagogical constructs can be analysed with reference to a systemic whole

- the mediation of tools or signs (mediating artefacts) is useful with the sense of 'meaning' originally used by Vygotsky as 'the unit of mental life' (Davydov & Radzikhovskii, 1989, 56). This is not a strictly 'psychological' category, but also includes a semiotic dimension. It is useful in enabling me to include: methods, conceptual frameworks, ways of communicating. Note : according to Engeström (Engeström, 1999, 29) this is also the locus where humans can impose control on their environments through the process of externalization, (for example using innovatively and creating artefacts)
- internalisation and externalisation are useful concepts (which in Engeström's system produces 'expansive learning') to analyse the dialectic relationship (reproduction or creation) between mediating artefacts and the base of the triangle. I will look at the way new methods might have been dictated by the structures and vice-versa through a process similar to what Giddens describes as structuration.
- the difference between collective activity and individual action enables me to look at conflicts and incoherences that might occur between the macro and micro levels. Lacking perhaps (although it may be partly present in the 'community' node), is the analytical framework for the meso level.
- AST is an historicist framework that attempts to capture individuals and groups through their history (see what practically this means for Engeström, the unit of analysis is neither the individual, nor the culture but a collective activity system (Engeström, 1999, 26)

What is missing from this framework

- Ideology and agency – decisions and approaches adopted with reference to lecturers' own ideological framework and personal beliefs about the purpose of higher education

- Subjectivities and personal histories – the individual dimension which tends to be over-emphasised in cognitive approaches is absent from this framework. This includes passion for the teaching, desire to induce a student in a discipline and so on.

Illustrations from my own research

I have found so far that there were a number of factors influencing lecturers approaches to teaching in HE:

- how they relate to the discipline (are they an advocate? How they view it, on what side of the disciplinary paradigms they sit? The status of their discipline nationally)
- the communities in which they operate (teams and departments), and those communities views on teaching, research, curriculum design, as well as a commonality of fates (research inactive) or of views (purpose of higher education)
- the structures in which they operate (location of the department, status of the discipline/department in the institution, institutional focus on teaching or on research)
- ideology (beliefs about society, education etc)
- their perceptions of students
- their prior experience, life and professional experience

Examples of how structures influence approaches

Isolation

because we are not part of a degree in linguistics, it's not a language degree, we are always a bit like the stranger in a train. P4

Stigmatisation/ success linked to specificity of staff

within the discipline, there are always more women than men. And a lot of women in senior... so the norm wouldn't necessarily be the same as it would be in many subjects P5

One of the reasons why the innovation and that... is that we have had a very stable senior staff. P5

Relative autonomy

There is definitely room to do what you want. I don't feel I can't do things and any new ideas are well received. I've never been told oh well no you can't do that, um in terms of doing things you don't want to do? I think it's more the pressure on the work load and the time frame, I think those are the issues. I mean yes we could all work here 24 hours a day and still never get it done p7

Examples of positionings towards the institution

Research agenda as a threat, teaching agenda as a threat

I fear that the current obsession with the RAE is inevitably, especially from X, top-down. They are going to become far more interested in the research and I have no idea what that means for what will happen with teaching. I think it will bifurcate the department so that you start getting a much more segmented you know the research people and the teaching people, it is not at this point in the X geography department. P1

teaching is seen as low, demeaning and it is a pain to have to do and you have to get it out the way. Whereas I really enjoy it, I have just been marking and doing my marks and I do spend probably more time on it than I should as my boss says. P 10

And at the moment from my perspective it is too teaching... everything is subservient to teaching which is very different to an old university where it is the reverse way round. P5

I don't think the institution ever puts an emphasis on teaching as part of your duties, although obviously it does because this is a teaching based university there is always, you get the impression that it's not your main, it's not the thing that is going to get you promoted at university [...] Teaching is not considered the best activity for a lecturer in higher education, that's not true P3

Divergence with mission

what I need as a lecturer, is the belief that the university, the administration of the university has got its head and heart at the right place and I think that part of my distress last time was thinking, 'what if it hasn't', 'what if X really is completely buying the government imperatives about becoming more efficient more productive, competing to be in the top 10 universities. P1

In the first year you have an enormous amount of hours spent on how to get students to the point where they can write essays and clearly this takes hours and hours. So X is closing their eyes and saying we can do all of this *and* we can become a 5*. How can that happen? P1

Pragmatism of senior management

Some of them [departments] are more praised than others, or more supported, even if they are not in reality those who bring most of the money. I don't know if the national health department - midwifery and nursing sections within our university - are well supported, compared to for example the business school which seems to be the jewel in the crown P4

You [Senior Management] are just responding, you are not leading, you don't have a vision, you are just responding, to a QAA exercise, you just put everything in order because it looks good for a teaching and learning audit etc... but you are not committed to it [...]. P4

Elbow room

I would say this faculty and to some extent the university, there is very much a drive to try out new things. P5

Positioning towards the curriculum (examples taken from vocational curricula)

Boosting the image

I sort of put science at the centre of it all because we do sports science, we do sport science for psychology, sport science for coaching, sport science for nutrition or simply sport science. So the common... the thing that ties it up together is the science P3

Compliance

There is no doubt that this is predominantly a vocational university, virtually, not all but the majority of our programmes are vocational, and they are driven by that in that the students are ... they are looking for a qualification but a qualification that will lead to a job or jobs in an industry. P4

Now what about the actual content, what do you teach? What are you teaching? What is your discipline about?

I'm just trying to think [...] It's very difficult to say what is it about my discipline that I have taught them because on the degree they are here for two days and they are in practice for two days, so I think a lot of their learning has gone on in the practice setting [...]. The sort of things that we talk or that I would be teaching here would be 'how do you manage time', so time management also consultation, I teach consultation skills in the classroom, so I will deliver some theory around how a doctor...

Positioning towards the department

Anomie

Does your department have a specific view about how to approach your clients, what to do, how to teach?

No No

Why not?

Because they are clueless.

290 So there isn't a strong drive coming from the department, taking you in one direction or another?

No. You can work in your own aquarium, let's put it this way.

And are you happy about that?

Oh yes

It enables you to do what you like

Yes P4

Positioning towards broader frameworks

Compliance

We have guidelines as to what we have to teach you know the BPS (British Psychological Society) accredits our courses. So there are certain things that we have to teach. P2

It is nice to have a little bit to go by, you wouldn't like to go completely blindly with the freedom to teach whatever you wish because there would be too much variability P2

Positioning towards discipline

Anomie

I don't have a particular tie for my discipline. I don't think that my duty is to turn out good geographers. Again I have said before I have no big disciplinary allegiance. I like geography because it allows me to do the things that I like doing, it is not a discipline that tends to force people into doing things a certain way. P1

Positioning towards research

Confidence building

I think there would... a) the teachers would get some escape from constantly the teaching activity and therefore it broadens their role but I think it would help us underpin more and more of the teaching with research findings. That is not that teachers don't but the bigger the pool of actually active researchers, students like to know it from the person doing it. You can say 'from my experience'. P5

I mean I've been here for nine years and I've never written an article, so we've set up a writing group and we're beginning to get things published and apart from the sense it gives us ourselves, I feel that sort of one's... It's not research but we're moving in the right direction we are getting things published in whatever we are doing. P7

Ideologies

to me pedagogy and research and thinking are very tied up with desire; and I mean desire in a very general sense of that word. And I do think teaching is not about the kind of contract that law or corporations are engaged with, and have to be engaged with. P1

there is much more of a social care attitude within the university, and I think rightly so. P5

Getting that BSc Honours is a real achievement in terms of who they are and I'm now I'm a valid person... I've got... I'm a nurse but I've also got a degree, and that that for them is very important and the graduation ceremony is a big thing. P7

Conclusion

I have shown in this paper that a methodology which enables the researcher to take account of the wider teaching environment, as AST does, provides a richer picture of the ways lecturers approach teaching in HE than more psychologically oriented perspectives. This methodology informs the ways in which teaching is approached both technically (with regards to the methods used) and conceptually, in terms of what it means to teach within today's frameworks and communities of higher education. I have also indicated that the ideological and experiential dimensions are missing from this framework, although they too influence the way a lecturer conceives his educational role. Although data analysis is still in its early stages, I feel confident that this incursion into social practice theory enables me to provide a richer depiction of pedagogical identities in the tertiary sector. This should usefully inform the methodological debate and provide useful practical outcomes for educational development research and policy making.

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