Formative Assessment in a Professional Doctorate Context: Developing Identities as Researchers

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OVERVIEW

This case study describes a task designed to support formative assessment in doctoral contexts. It was conducted within the collaborative EU-funded project 'Internet-Based Assessment' (2002-2004). Formative assessment was conceptualised from the perspective of sociocultural learning theories. These emphasise learning as becoming students' construction of new identities (here as researchers) through engagement in authentic tasks. The task design involved a series of peer and tutor formative assessment activities in a blended learning setting. The study has added interest from having been implemented by a tutor whose own research area was formative assessment (see Pryor and Torrance, 2000; Torrance and Pryor, 1998; 2001) and for its contribution to formative assessment theory from a sociocultural perspective (Pryor and Crossouard, 2007). Given the considerable expansion of doctoral education, the blended task design is also considered useful for developing more collaborative forms of doctoral supervision that support student agency.

Keywords
Instructional design, formative assessment, doctoral pedagogy, sociocultural learning theories

INFORMATION ABOUT THE COHORT, MODULE AND PROGRAMME

The research took place in the context of a Professional Doctorate in Education (EdD) in a research-based university in England. Professional doctorates are distinguished from 'traditional' doctorates by having summatively assessed taught modules in their early phases. The research focused mainly on the programme's second module (Research Methods and Methodology), conducted over four months of its first year. Its teaching involved two face-to-face weekend workshops, each giving ten hours contact time. This short contact time seemed to be constraining peer learning, which was at the heart of the pedagogical conceptualization of the programme. The EU grant allowed a dedicated website to be developed to extend opportunities for interaction and formative assessment. It also provided funding for this intervention to be researched using in-depth qualitative research methods.

The cohort (11 students) was a highly diverse group, consisting of 8 women and 3 men from a range of professional contexts within education and social work and from a range of ethnic, social class and disciplinary backgrounds. Some worked within the same profession, but with different roles – practitioner, manager, regulator – giving rise to issues of power

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between the students. Three lived outside mainland Britain; the others lived within a 40 kilometre radius of the university. Two worked at the university.

The assessment task was to write about the methodological issues arising from developing and using a research instrument. In more detail, the students were to develop a research proposal, develop a research instrument for use within this, pilot the instrument, and then report methodologically on its use. The object of the assignment was not therefore to generate research findings, but to problematize and reflect upon the processes of conducting research.

DESCRIPTION OF THE CASE

The workshop sessions during the module focused on research methods and methodology, but also had sessions devoted to students' development of the assignment task. This was initiated by the tutor during the first workshop, when he provided an outline for a research proposal within which their research instrument would be used. This gave headings for students to address, such as research methodology, research questions, research methods, ethical issues. Students began drafting their proposal during the workshop, with face-to-face advice from the tutor. They then took part in a tightly-structured series of formative assessment activities (Figure 1), involving peer critique of each other's draft proposals, followed by tutor email feedback on their revised draft. After further formative assessment from both students and the tutor in a face-to-face session that focused on methodological issues arising during students' ongoing assignment development, a second cycle of peer and tutor formative assessment then ensued, focusing on students' draft research instruments. A third round of email feedback was given by tutors on students' final reflection on their research pilots. This text was summatively assessed, and like all assignments at D level, graded on a pass/fail basis.

Although HE literature often equates peer assessment with grading, here it entailed qualitative responses to students' ongoing task development. The rationale for peer assessment and tutor assessment was for this to contribute to their assignment development and broader learning. As Sadler (1989) argues, students need to have opportunities for authentic evaluative experience with the support of a 'connoisseur' (i.e. a tutor or teacher) while they are engaged in producing the texts that will later be summatively assessed. This allows this evaluative experience to feed into students' texts, bringing them closer to the norms of the summative assessment community:

> *'Knowledge of criteria is "caught" through experience, not defined. It is developed through an inductive process which involves prolonged engagement in evaluative activity shared with and under the tutelage of a person who is already something of a connoisseur.'*
>
> (Sadler, 1989, p.135)

Peer assessment is therefore a formative experience, rather than having summative authority. Sadler (1987;1989; 2005) consistently stresses the importance of a standards-based, hermeneutic approach to assessment, where assessment of complex learning outcomes does not take place on a right or wrong basis, but relies on the shared 'guild knowledge' of the assessment community, much of which is tacit, and are not readily made transparent through learning outcomes frameworks. As Sadler (2005) notes, interrogation of learning specifications only 'sets up new verbal terms that in turn call for more elaboration, and so on in infinite regress' (p.192). Sadler (1989) also notes that knowing the requirements of the assessment community allows its rules to be creatively bent. This is important in its implications for change and creativity within educational practice as well as more widely within society.

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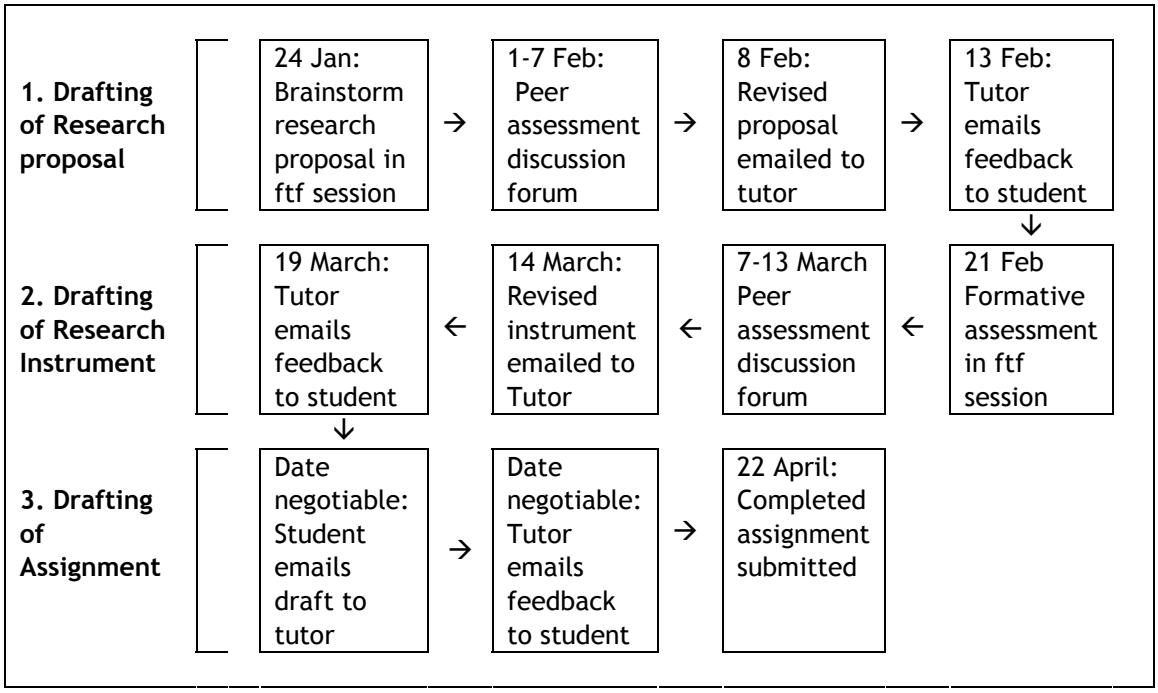
The proposed dates were negotiable and participation was not mandatory. The tutor did not participate in the online discussion forum, but monitored student postings, acting as an observer, although his reading of student postings fed into his formative assessment in face-to-face settings and by email.

Figure 1: Task structure with opportunities for peer and tutor formative assessment



The framework therefore generated two opportunities for peer formative assessment in the online forum and three for tutor formative assessment by email, in addition to the second face-to-face workshop that generated formative assessment in a group face-to-face setting. This strong explicit framing aimed to make extended collaboration possible between peers and the tutor in their assignment task development, potentially reconstructing the division of labour where a tutor is predominantly a summative assessor, although still attending to assignment quality criteria (Sadler, 1989; 2005). Given the importance of peer critique and review within research, peer formative assessment had high task authenticity.

RATIONALE IN TERMS OF EDUCATIONAL IDEAS

The case study drew upon sociocultural and situated learning theories (e.g. Lave and Wenger, 1991; Brown et al, 1989; Cole and Engeström, 1993). Lave and Wenger (1991) stress the importance of creating opportunities for learners' legitimate peripheral participation in whatever practices are to be learnt, making task design central to create opportunities for learners' engagement in authentic situations and tasks, in the company of experts who can model the practices to be learnt. In this theoretical framework, learning is not just a cognitive process, but is cultural and relational, entailing the construction of new identities.

Cultural Historical Activity Theory (e.g. Engeström, 1987; 2001) was also useful for interrogating power relations between the different actors in the setting, i.e. the divisions of labour among peers, and between peers and the tutor. In constructivist learning a significant tension lies in the different positions of the tutor, between their potential collaboration with learners to produce best performances during their learning (formative assessment), and their position as judge of these performances (summative assessment).

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These entail very different power relations. A tutor's formative assessment ideally involves sharing their disciplinary experience and also their awareness of the standards required in the assessment regime, so that students' work and the development of their learning is in dialogue with summative assessment requirements. However, as Boud and Lee (2005) highlight, a supervisory role is potentially strongly hierarchical and may produce defensive relations that inhibit learning. The importance of power relations and their impact upon feedback processes has also been recognised in other higher education settings (Higgins, 2000; Carless, 2006). The deliberate intention to create spaces for collaboration between students and the tutor, to support their 'best performances' during their task development, may also conflict with traditional notions of independent learning. As Gipps (1994; 2002) has noted, reconceptualising assessment practices to take account of sociocultural learning theories is a major challenge.

EVALUATION

The research methodology was also underpinned by sociocultural learning theories that emphasise the reflexivity of learning and of research processes (Grenfell and James, 2004). It included action research elements where the authors had multiple roles. The second author was tutor for the module in focus and director of the EdD programme, but was not otherwise active in constructing the data set. This was accomplished by the first author, at the time a doctoral student whose studentship involved developing the dedicated website and the data set.

Research methods included participant observation of face-to-face teaching sessions and two series of in-depth semi-structured interviews with the eleven students, one shortly after they began the programme and one after the module was completed. These were recorded and transcribed, then analysed for emergent themes. All discussion forum and email texts were analysed using elements from Critical Discourse Analysis (Fairclough, 2003), in addition to quantitative data on student participation. The study therefore produced a rich data set that incorporated both tutor and student perspectives.

Analysis of the tutor's feedback showed it to shift between aspects that were very concrete, focusing on improving the task in hand; aspects that focused the learner on the discursive construction of the setting (i.e. drawing attention to the assessment criteria, who decided upon these), and in addition drew attention to learning as a process of becoming, as illustrated in Figure 2 (Pryor and Crossouard, 2006). It also attended to the students' agendas, in addition to the demands of the curriculum, and therefore moved between what Torrance and Pryor (1998) describe as divergent and convergent assessment.

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Figure 2: What is going within formative assessment (from Pryor and Crossouard, 2006)

Purposes	Questions arising for learning	Mode of engagement
Completing task in hand	How can I/we get this done?	Concrete
	How can I get this done well?	
Thinking about improvement	How might I do this better?	
	How did I do that?	Reflective / discursive
Making sense of criteria	What does better mean?	
	Who decides that?	
	Why do they think it is better?	
	How does this relate to power issues?	
Invoking learner identities	How am I implicated in this?	Existential/ discursive
	How does this relate to my identities?	
	Who am I ? Who do I wish to become?	

Discourse analysis also showed that he addressed power relations in the context, by switching between different levels of authority in the way he engaged with students, representing himself in different ways, i.e. as a researcher, learner, critic, teacher. Although not a conventional part of formative assessment, some students found his attempt to '*break down that model of dominant tutor authority figure and student*' very useful in allowing him to support them better in their learning.

In summary, his task design and response to students' texts thus brought together the elements of curriculum identified by Barnett (2000) who critiques the non-reflexive nature of much higher education teaching, and calls instead for 'an educational project for producing a set of subjectivities […] calling forth epistemological (knowing), praxis (action) and ontological (self-identity) elements' (p.258).

All students passed the module. In interviews, all commented on the value of the tutor's assessment feedback, contrasting this with their previous experiences of higher education, where assessment had mostly been limited to a grade. Some students attributed a transformed approach to their learning to the detail and manner of the feedback, which allowed it to contribute productively to their learning. Although the ontological element of his feedback was not recognised as part of his formative assessment practice, some students' comments showed the importance of this aspect of their learning:

> *'This issue of reflexivity which [the tutor] continually emphasizes and identity, which is really kind of useful. It's about who you are as a researcher and a practitioner and the course is about helping you along that path, and that's a very kind of exploratory process'*

The discussion forum space had a more mixed response. All students participated in the peer activities, although the level of participation varied. Factors constraining participation were illness, significant professional commitments that coincided with the tutor's framework, but also the different value and authority attributed to student versus tutor comments that relate to traditional assumptions of learning and the difficulty of reconceptualising the tutor as a collaborator, rather than only a summative judge. For some, the authority of the tutor remained too strong for them to give value to peer assessment. However some conceptualised the peer critique activity as being part of their development as a researcher, in ways that again resonated with the ontological aspects of

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the tutor's feedback. For such students, participating in the online activity disrupted hierarchical relationships between students and also contributed to a more critical and less dependent relationship between students and tutors, where one student saw the online activity as about 'adult learning and not relying on your tutors to do it all for you'. Although initially happening in the online forum, this then spilled into the face-to-face setting, suggesting the development of cohort relations that were much more productive for peer learning.

Nevertheless the difficulties of providing this quality of feedback and of sustaining the task design should not be underestimated. As Eraut (2004) points out, experts' performance is often tacit, so identifying aspects of different disciplinary practices is a significant task. Researcher conventions are also clearly contentious (Grenfell and James, 2004), while bringing this into pedagogic arenas adds further complexities, such as the need for pedagogic content knowledge (Yorke, 2003). This clearly requires a complex conjuncture of knowledge and skills and a willingness to engage with teaching, not only research. This all becomes highly problematic in pressured educational settings. The sustainability of this task framework must also therefore be considered. Eraut (2007) warns against ideologically attractive theories of practice that are almost impossible to implement. The intervention was certainly time-consuming for the tutor, although he described it 'worthwhile work'. The forum activity was clearly delimited however; it had to be manageable for both sides, not constructed as an open-ended engagement. However students' responses show that the tutor's investment was supporting peer networks that would alleviate the potential dependency of dyadic student-supervisor relationships.

In conclusion, despite such problematic aspects, the task design described here seemed productive for the students, developing an alternative assessment regime that stressed the social dimensions of learning and created collective forums that supported this. The usefulness of the leitmotif of identity certainly seems to merit more exploration, both in doctoral and other HE contexts, while the concepts of convergent and divergent assessment seem useful for supporting a more pedagogic conceptualisation of higher education learning that still attends to students' agendas.

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