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**Creating an Alternative
Assessment Regime
with Online Formative
Assessment:
developing a researcher
identity**

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1. Introduction

This paper discusses the nature and potential of formative assessment in higher education through the exploration of an alternative assessment regime within a part-time professional doctorate programme (EdD). The programme mainly uses a face-to-face (FtF) mode of teaching and learning but the data here relate mainly to online interactions (OL). Thus the paper is dealing with a blended learning environment. The context was an the education department of an English university, which was a partner in a research and development project funded by the Minerva Programme of the European Union to explore and theorize online assessment.

Professional doctorates emerged in the UK in the 1990s in response to the needs of mid-career professionals to engage with and theorize their practice and to the increasing demand for accredited learning for professional advancement within settings such as education and social work. A four year part-time programme was first launched in this university in 1999, the fourth cohort beginning their studies in October 2003. The cohort structure is a central part of the pedagogic conceptualisation of the programme, since it aims to build on the professional knowledge of each group of students. The onerous work commitments of most students create a particularly challenging context for their studies. In the first two years it is taught through six weekend workshops per year and is thus not considered a distance programme. Interviews confirm that students in different cohorts and tutors consider human contact and interaction a highly valued element of the course. However time for dialogic interaction during weekends is short. The development of a dedicated website to create a blended learning environment was thought to have interesting potential to overcome such limitations. This paper describes and analyzes how this innovation was used to create an assessment regime involving online peer and tutor formative assessment.

The main data set derives from a module on research methods and methodologies. Although not specifically emphasized in official documentation the course convenor articulated as the main aim of the module that students should begin to develop identities as researchers. Thus, assessment was seen as a way of developing students' awareness so that their current knowledge and understandings might be in dialogue with the expectations of the academic research community and beyond this to bring into critical scrutiny the social practices through which this was accomplished.

2. Theoretical and Analytical Framework: Cultural Historical Activity Theory and Conceptions of Assessment

A key resource in our analysis of the data is Cultural Historical Activity Theory. This offers a useful heuristic to explore the relationships between human action and the cultural, institutional and historical contexts in which it occurs (Cole & Engeström, 1993, Wertsch, 1998). The concept of the Activity System, seen as 'complex formations in which equilibrium is an exception and tensions, disturbances and local innovations are the rule and engine of change' (Cole and Engeström, 1993, p.8), provides a means to explore assessment within this doctoral programme and the particular

innovations which were attempted. It permits a theorization of the 'cultural tools' used within these activity systems, including the discursive practices of the different communities in question, the different aspects of the online environment and the pedagogic structuring of the interactions. Finally it enables a socio-cultural analysis of the different factors which make these tools differently available to constrain or enable learning (Wertsch, 1998: 24).

While within this project the online environment itself and its different manifestations can be seen as particular instances of cultural tools, any setting should be recognized as being unendingly filled with such tools, examples being diagrams, notes, pens, books, indexes, conceptual frameworks such as activity theory itself, not to mention computers and their adjuncts. The conceptualization of language as the 'tool of tools' (Cole and Engeström, 1993, p. 6) reflects the extent to which it pervades each aspect of the activity system, playing a constituent and a constituting role in its construction. Indeed this role is not confined to the context being analyzed, but extends also to the processes of the research and its representation in this text. Attention needs to be paid then to the performative role of language in *doing things*, and to the dialectical relations between language and all other aspects of the activity system, along with the power relations which inhere in these. So rather than a tool or set of tools being manipulated by an individual for social or cognitive purposes, we understand a tool as being in play within particular patterns of social and political practice and can be seen therefore as 'ideologically and culturally saturated behaviour' (Maybin 1993:143). Here the emphasis that Wertsch places on the 'material dimension' of cultural tools, where (spoken) language is represented as perhaps fleeting, 'but no less real for that' (1998, p. 31), seems misplaced. We would instead align ourselves with MacLure, who cautions against a '*belief in the innocence of words and the transparency of language as a window on an objectively graspable reality*' (MacLure 2003:12, original emphasis), and where 'reality' and the discursive are thoroughly entangled (MacLure, 2003, p. 7). Assessment is seen then as an intersubjective accomplishment, brought forward and collaboratively constituted through dialogue, where metasocial and metalinguistic aspects are central to the way it is played out as a social practice (Torrance & Pryor 2001). In this context, activity theory might enable an exploration of the practice of assessment, including its online aspects, engaging with the ways its rules and division of labour are played out, and so highlight these for the critical analysis and possible 'expansive reconceptualisation' of its role in supporting learning (Cole and Engeström, 1993).

This view of assessment is clearly far from discourses based in scientific measurement and behaviourist learning theories where technical considerations focus on prescriptive assessment procedures (Shepard, 2000; James, 2000). Although called into question for much of last decade, these discourses often prevail in higher education, where online assessment is frequently related to the hierarchical concepts of Bloom (1965). Our concern is rather with assessment as a social practice, with an analysis of contexts paying attention to social dynamics and tensions at work, attempting to identify factors which contribute to a potentially more equitable assessment regime where both form and content are problematized by students and teachers. Like Shepard (2000) we seek to develop a theory of assessment congruent with constructivist learning removing the 'curious separation' of assessment and learning noted by Graue (1993); where assessment practices contribute to student learning and developing shared understandings of assessment (Sadler, 1989).

Optimally then, formative assessment might create zones of proximal development for students where students in collaboration with peers and tutors scaffold their learning (Vygotsky, 1986; Bruner, 1985). It might also assist in a critical progressive understanding of the assessment criteria

to enhance their ability to judge the quality of their work and act accordingly (Sadler, 1989). Research into formative assessment in the classroom has demonstrated how highly complex and demanding its processes are, particularly in the hurly burly of activity where the demands of classroom management limited teachers' opportunities and capacity to focus sufficiently on formative aspects (Torrance and Pryor, 1998; Torrance and Pryor, 2001). However, within a blended learning environment for doctoral students, such pressures might be diminished, while the importance of developing students' critical awareness of the social processes at work would clearly remain acute.

The term assessment regime is used deliberately to invoke comparison with Foucault's (1991:72) notion of a regime of truth whereby truth is discursively produced rather than being some absolute quality. In each society the regime of truth consists of "the types of discourse which it accepts and makes function as true; the mechanisms and instances which enable one to distinguish true and false statements, the means by which each is sanctioned; the techniques and procedures accorded value in the acquisition of truth; the status of those who are charged with saying what counts as true." In a traditional assessment regime activity theory might characterize the division of labour as belonging within the tutors' role, providing accreditation or grading as defined by the rules of the academy, and the students' performing passive submission to summative processes. However, within an alternative assessment regime, assessment might be conceptualized as a tool for learning, still situated within the frameworks and constraints of the academic community and its activity system, but shifting position in relation to learning such that students have an active role, appropriating assessment as a tool to be used by them, in conjunction with the representatives of the academy. This might apply both to peer and to tutor assessment, and indeed to tutors' formative and summative assessment.

This reading also calls for a different interpretation of power relations, whereby power is seen as productive rather than necessarily oppressive. Within this formulation the power of the academy is not actually diminished, since the criteria for judgment and the power to make judgements remain in place. However, through discussion and elucidation of assessment as a social practice, students themselves might come to gain a fuller, more active understanding of these criteria and to use them to evaluate and shape their learning (Sadler, 1989). Thus power circulates in different way - the tutor retains a central role to play in developing such an assessment regime, but the power might be described as 'power *with*', where students may better access academic authority as a tool for their learning (Kreisberg, 1992). Thus, formative assessment is seen as a means both to extend critical analysis of the practices of the academy, and as a way of making those practices accessible to a more diverse student body.

3. Research Methodology, Methods and Data Analysis

The research described here is exploratory and interventionist. A qualitative case study approach involving elements of action research was adopted as being particularly suitable for an in-situ exploration and representation of a complex situation, its special value being both its particularistic and holistic nature. In line with the social constructivist methodology of activity theory, an interpretative research paradigm was adopted (Berger & Luckman, 1966). In the attempt to represent the case from the perspective of the participants we have used predominantly qualitative but eclectic data sources to generate a 'thick description' (Geertz, 1973). Recognition of the inevitability of interpretative processes in the representation of data has necessitated a high level of

reflexivity in the researchers in examining their role within the research. Where possible we are sharing interpretations with students who are the subjects of the research to open up further dialogue on interpretations of the data. This is best seen less as 'respondent validation' than as a recognition that as in much action research, roles within the research process are problematic, since those engaged in interpretation are also implicated in the substantive activities. One of the authors was both tutor and director of the doctoral programme, but was not otherwise directly active in creating the data. This was accomplished by the second author, also the developer of the dedicated website through which the discussion forums were conducted, but was otherwise not centrally involved in the teaching. This role did however involve regular contact with the tutor, allowing rich participant observation within the university setting. She also conducted participant observation of the face-to-face teaching sessions and two series of semi-structured interviews with the students who participated in the module in question (11 students). The third author, as the previous programme director, knew the setting intimately but now at another university, was involved neither in teaching nor data collection. He had been instrumental in earlier discussions with the EU partners in securing the research funding however. All three researchers were involved in the analysis, theorization and the writing of the paper. Within this arrangement reflexivity was not just a retrospective critical addendum to writing up, but an ongoing dialogue within the research¹, which problematized both views of actions and practice and complex power relations between us. Permission was obtained from the students for their discussion forum postings to be used as data, as well as email correspondence relating to assessment matters between them and the tutor for the module in question. The interviews were taped with the permission of the participants, transcribed and analyzed for emergent themes. Discussion forum contributions were analyzed using discourse analysis. Analytic techniques developed by proponents of Critical Discourse Analysis (Fairclough, 2003) were particularly useful to explore the construction of online formative assessment paying attention not only to linguistic analysis, but also to the social context in which the text was embedded. Insights from these analyses have been used in this paper, although space available does not permit reproducing them in detail. Some quantitative analysis of the discussion forum interaction was also carried out, focusing primarily on participation rates.

The primary data source for this paper is the interviews conducted with the student participants; in the main these were conducted at the beginning of the programme and then repeated after the conclusion of the part of the programme which had a strong focus on online formative assessment. Pseudonyms are used in all quotations to maximize the anonymity of respondents. Contextualization draws on observation data.

4. The Development of the Assessment Regime

4.1 Context

The research focuses on a module taken by 8 women and 3 men from very diverse professional contexts within education and social work, all with master's degrees. Three students might be considered 'distant' learners; the others lived within a radius of about 40 kilometres from the university, with several in its immediate vicinity. Two students worked at the university itself, one full time and the other part-time. A third of the cohort worked substantially from home, making IT support problematic for some. While all used email and the internet, their attitudes to changes in

¹ This often gave rise to dialogues such as: 'I think I did that, at least that was what I intended to do'.
'I'm not sure you did, at least that's not how I read it. On the tape you seem to be saying....'

their lives which they were experiencing as a result of these technologies, were varied. The internet was recognized as a '*mixed blessing*', and concern was expressed about work/life balance and the neglect of interpersonal contact that could ensue:

we underestimate the importance of human interaction, of sitting down, of talking and exchanging ideas and working through problems and issues and the personal relationships... email... makes those transactions between people quite clinical and quite functional..

(Hugh)

Several students were unaware of any online element until the start of the course and none identified it as an important element in their decision to enroll. Many students spoke instead about the cohort structure of the course, or the value of its face-to-face nature, having ruled out distance programmes for that reason. The attitude to having the website available was generally, but not universally, positive.

4.2 Aspects of Implementation

Within the alternative assessment regime assessment was addressed in both face-to-face and online environments. From the beginning assessment was highlighted in the face-to-face seminars, with the final session of the first weekend workshop devoted to developing the students' awareness of the assessment criteria. Additional explanatory material about the assignments was also posted on the website. Online assessment was approached in a gradual way in the first module, leading to an online activity to develop student's awareness of the requirements of the assignment task ahead. Students critiqued an online article in small groups within a discussion forum, with the tutor responding to each group with formative feedback on postings.

In the second module, assessment was again addressed from the outset, with an early face-to-face session. Here, after first inviting students' questions about the assignment task, the tutor encouraged the students to deconstruct the assessment criteria. He explicitly pointed to the power relations enacted by the reader of their assignments, exhorting the students to '*enter the world of the reader*' and engage in '*a cultural reading of the degree*' and its discourse (Researcher Observation Notes).

During a computer session the following day, a highly structured series of online activities was proposed to the students by the tutor involving two separate cycles of online peer and tutor assessment. Students were asked first to post their research proposal within the discussion forum for peer comment and also to comment critically on the proposal of at least one other student. The revised draft was then to be submitted to the tutor, who provided formative feedback to the student privately by email. The second cycle was similar, focusing on the research instrument which the students had to develop. A highly structured framework was drawn up by the tutor, providing a series of activity deadlines, although the formative submission deadlines were recognized by him as negotiable (see Appendix 1). The discussion forum was unmoderated, although the tutor informed the students that he would monitor postings, so effectively playing an observer role.

All students participated in these activities, although the level of participation varied considerably, with two students posting their own work, but not commenting on the work of others, and four students participating in one, rather than both of the peer assessment cycles. At the other end of the scale, while the students were asked to comment on the work of at least one other student, some commented on three or four, and seemed to benefit from receiving more comments

themselves. In several cases a longer dialogue evolved, leading to an exchange of reading notes in one instance. Interview data also show further discussion arising from the peer activity but carried out via personal email. Appendix 2 provides a diagrammatic representation of the discussion forum interactions, while Appendix 3 provides a tabular representation of the same data. Deadlines for submission were not wholly met, but fell approximately within about a week of those suggested. Discussion forums were created for students to raise issues about the different key readings for the module but no postings were made into these (voluntary) forums at all. A further session at the second face-to-face workshop for this module was devoted to issues arising from the assignment, with peer discussion and critique as well as tutor formative assessment.

A notable feature of the tutor's dialogues with students was his suggestion that they respond by drawing on both on their professional or practitioner identity and their emerging identity as a researcher. Identity therefore was presented as being constructed and continually renewed through processes of engagement in different socio-cultural contexts rather than as an element of a unitary self (Hall, 1996). A concept of learning was explicitly promoted which involved identity formation, implying 'becoming a different person...[where] identity, knowing and social membership entail one another.' (Lave and Wenger, 1991, p. 53). A similar discourse about identity occurred during tutorial supervision; one student, interviewed immediately after a tutorial, said of the EdD programme:

'I hope it'll pull together a number of different streams about my education and about my professional past and help give me a more consolidated professional identity. And it is already doing that.. I was talking to John about this half an hour ago.

(Hugh)

Discourse analysis of the tutor's responses within the first online peer activity also suggests how he invoked the identity issue for the students and draws attention to his own role as representative of the academy. As academic tutor he can make explicit and categorical evaluations of the student's comments, as well as make statements about what is valued in the programme itself and within the research communities. He brings to the surface his position of authority, drawing attention to his role and elaborating on the nature of his practice within that role. The students are positioned by him in several ways, as students within the academy, being initiated into its discourse requirements, but also as apprentice researchers and as participants within its discursive space, a further concept which is called into being and valorised. Evaluations made on student comments are used as a platform to invoke these different identities, as well as to make the requirements of the forthcoming assignment more accessible. So for example in this forum he commented:

Carol's point is really important in that the idea of using the literature to deconstruct your own professional context is central to the EdD. All through,[...], working with your professional practice and identity is the purpose of a prof doc. The discursive space that readings and discussions with colleagues provide enables us to look more radically at what is happening in those contexts because it potentially helps us to question the taken-for-granted.

The tutor therefore recurrently invited his students to consider themselves as participating in the process of becoming a researcher. Although emphasizing his role and powers as representative of the academy, he also constructed opportunities for the students to critique his practice, and that of the other tutors. For example in one of the seminars he was observed to invite criticism of own

thesis, explicitly recognizing a problematic area, and inviting students to judge this for themselves. In this way he gave the students an opportunity to critique the academy, where they might develop their voice and researcher identity.

5. Interview Findings and Discussion

Second interviews were conducted with ten of the eleven students in the cohort who participated in this module, and reveal stark differences in their perceptions of the online peer assessment, but much greater consensus over the value of formative assessment from the module tutor(s). Quotations from the interviews illustrate the representations of the students, with pseudonyms being used to protect their anonymity as much as possible. The findings from the interview data for online peer assessment and formative assessment by the tutor are summarised and each discussed in relation to activity theory, although in less detail for the peer assessment. We then turn to a discussion of the alternative assessment regime, drawing on the theory of formative assessment which underpins it, and attempt to highlight factors which affect students' engagement with its dialogic processes.

5.1 Online Peer Assessment

For three students a variety of tensions seemed to have contributed to their low participation in this activity. Another student who was a low participator has not been interviewed since the module, but from a first interview is known to have difficulties accessing the internet and is not confident using IT. All four were involved in one cycle rather than two and while they posted their own drafts, three did not comment on those of peers. Only one of these postings received more than one comment, and one received none, being posted outside the activity deadline.

A first tension appears to be the lack of a shared goal, where it was not clear what the advantages or objectives of this activity might be. It may have had doubtful value for those more strongly rooted in a particular field of practice for example, particularly if the professional experience of the cohort as a whole seemed distant from that. While five of the eleven students represented a desire to become more involved in research, for others, the researcher identity invoked by the tutor may have had less resonance and the relevance of peer comments or of developing one's own critical stance seemed less obvious.

Furthermore the use of the website and its discussion forum facility as its mediating tool dislocated the activity from the established practice of some, and while email was used by all students, accessing the website was outside that routine, and an unwanted chore. Pressures arising from individual professional and personal contexts brought the activity into conflict with other important demands on their time, so leading to criticism of the structured and time-consuming nature of the activity, described by one as a '*burden*'. Established patterns of using the internet for learning and preferred methods of studying were both raised as obstacles to participation.

Crucially however, a key tension, compounded by the factors above, appears to lie in the attribution of assessment as being within the division of labour of the tutor. Under pressure, students prioritized the assignment submission to him, to gain his formative feedback, and doubts were expressed about the value of peer critique. Previous assessment and learning histories, implicitly held learning theories, goal orientation, and the socio-cultural backgrounds of the students - their assessment career - made it difficult for them to participate in this unfamiliar assessment discourse. This is discussed in greater detail below.

Others found the online peer assessment activity valuable, which seemed to relate to the emergence of a shared goal of learning to be a researcher, and to a reconceptualization of subject

positions. It was seen as valuable socially, in overcoming the potential isolation of this kind of study, and in contributing to a sense of involvement and to the identity of the group. In relation to the researcher identity invoked by the tutor it was also viewed as useful for developing an awareness of different research methods. In particular it appears to have disrupted an emerging polarization of students' sense of themselves as either qualitative and quantitative researchers. For some it seems to have contributed to an ability to make, receive and respond to critical comments, as part of an engagement with what it is to be a researcher. Some talked about now drawing on the research instruments posted on the site to inform their next assignment, and Eileen spoke of the value in the future of sharing experience when finding your research overlapped with '*someone else's patch*', suggesting an emergence of shared collective learning.

On the other hand these generally positive oriented students expressed some qualifications echoing those of the more negative group. Often these related to its highly structured nature for example, and the ways this had been problematic for professional or personal reasons. Nevertheless, this tension was productive by some, for example as a useful '*carrot and stick*' in encouraging busy professionals to engage with the assignment. When forums were created but no participation structure provided, our students did not contribute to them, suggesting that participation in the online environment needs such structure. Wikeley & Muschamp (2004) suggest that increasing structure online can create expectations of participation, and our students' interactions seem to confirm this view. The structure as a cultural tool, by reducing the potential complexity of the situation, both constrained and enabled students' learning, and can this be seen as a kind of 'scaffold' (Bruner, 1985). Sawyer (2003, p. 17) highlights this ambivalence in classroom teaching referring to the difficulty of finding a balance between 'the need for pre-existing structures and the need to leave flexibility for collaborative emergence to occur'. A difference however lies in the relative inflexibility arising from the projection of this online structure into the future, in contrast to the fine-tuning that is possible in classroom teaching. Observation data shows how the tutor was able to modify face-to-face sessions to accommodate student discussion and activity. Although the tutor did allow a margin of flexibility in the online submissions, for some students participation was simply impracticable for personal or professional reasons. However where a student felt a desire to contribute to the cohort and found that this was not possible, this could have created tension and added to affective needs. Here again the tutor seemed to have played a significant supportive role.

In addition, the rules of the activity and its division of labour could not be assumed. Within a relatively unfamiliar social practice, relations which might be taken for granted within face-to-face settings were made strange for some. While some students conceptualized this as part of a role strain in their adoption of a researcher identity (and so negotiated their relationship with others in the forum in this light), others felt a tension which was less productive, seeming rather to create inhibition which had to be fought against before they could participate. This renegotiation however seemed to allow for some a reconstitution of the relations constructed in the classroom. One student (Carol) spoke of being "*able to feel confident that actually I do have a valued opinion*" enabling her to find a voice which had not been possible through classroom interaction. Claims have been made (e.g. Harasim, 1990) that computer mediated communication (CMC) allows more democratic relations to be played out (often involving conventional tutor/student power dynamics), although more recent studies (Jacobs and Cook, 2004; Reynolds et al, 2004) point to discussion forums involving a renegotiation of power relations, rather than their somewhat unlikely disappearance. Here discourse analysis suggests differences in the extent that students could adopt a tone of authority, more resembling the voice of a tutor, or take a position as a fellow

learner. The forum interaction also sparked off email discussions, of a more personal although theoretical nature, which were felt valuable. Finally, the later interviews have pointed to some students exchanging email drafts of their next assignment, without the intervention of the module tutors or the researchers, involving some of those who participated least in the previous online peer activity. This seems to suggest that for some a new division of labour is being shaped, involving greater reliance within the peer group, but also affecting interactions in the face-to-face setting.

Turning to the tensions in the language used in the mediation of these interactions, again no rules were readily accessible to define its register, adding to the role strain in some cases. For one who found the forums useful, an 'off the cuff' approach to making criticisms seemed important, as well as the use of language which was not academic in tone, and indeed was obviously typed quickly and not corrected for 'typos' for example. For another, very conscious of the public nature of the forum, it became time-consuming partly because of the care taken in composing messages. Other studies comment on the reflective and considered nature of discussion forums as an advantage (e.g. Hiltz, 1994; Garrison, 2002; Salmon, 2002) but in the case of a group of students with a highly pressured life, perhaps a lighter touch could be important, if combined with an awareness of social sensitivities that are implicated. The personal and humorous elements of some postings were also noticeable, fitting with arguments by Gunawardena and Zittle (1997) for the importance of 'social presence' in CMC. This also roots the comments in the personal style and identity of the student, something that can be problematic for students negotiating their relationship with the privileged and powerful discourses of the academy (Ivanič, 1998). The appropriation of an academic discourse has been recognized as a significant part of learning processes within higher education, involving not just technical linguistic details, but issues in which identity are thoroughly imbricated (Ivanič, 1998). This seems to involve strain in making words one's own, resonating with Bakhtinian theories (Bakhtin, 1981), which the public nature of the forum appeared to accentuate, but for some this was a productive tension. In the context of the tutor's intentions about identity development, these problems might also be seen as potentially helpful in the context of some metasocial reflection on the forum. However, despite the important role assigned to this in his theoretical stance, such a discussion has yet to take place.

In conclusion then, the online peer assessment activity created tensions for many of our students, and while for some these resulted in low participation, for others it seems the tension was more fruitful, and has contributed to a reconceptualization of subject positions which has been valuable for learning, often relating to the research identity invoked by the tutor. The online peer assessment activity seems to have contributed for some to the social cohesion and identity of the group, and their identities as researchers, both individually and collectively. The student initiation of the ongoing email peer review of drafts for the subsequent module suggests that students have found this valuable. On the other hand, the balance of structure and collaborative engagement seems delicate, and for some this tilted towards it being unhelpful for their learning, pointing to the need for vigilance in the use of peer assessment.

5.2 Tutor's Online Formative Assessment

In contrast to students in the peer assessment activity, the tutor's authority to critique the work of his students was explicitly accepted and acknowledged by the students. However his practices in formative assessment seem also to have redefined the conception of rules and division of labour, which students had developed in their previous experiences in education. Their memories of previous assessment were overwhelmingly of summative assessment, mostly confined to marks awarded rather than developmental aspects. This had sometimes been experienced in a personal

way, whether as successes or as failures. Some used metaphorical language involving relations of pain or discomfort, as for instance in the description of assessment feedback as '*an arrow to the heart*' (Davina)

Indeed, the level of formative assessment was new for all of the students, some being surprised that it existed at all, portraying learning at this level as being their own individual responsibility. All were highly appreciative of the online formative feedback in this module and for many it seems to have had significant benefits in pointing to areas of further learning, or in provoking revisions of previous understandings:

I've never in my studies got such detailed feedback of any work that I did, including my dissertation, for my MSc dissertation. He really, really read it very carefully [...] I felt that he really engaged in me, even though we never met, it was just all on the internet.

(Inga)

The influence the online formative feedback was held by many to be great and had led to important areas of development. Small comments in themselves, described by Davina as '*flag waving*', they were represented in several instances as having significant consequences for the students' learning:

they've just been really short little bits that have almost been casually thrown in that's really sent me off on this major line of enquiry or a major line of learning. ...

(Davina)

Formative assessment was represented by Carol as having transformed her approach to learning. She felt she had abandoned earlier approaches, which she characterized as '*coasting*', in favour of seeing her learning as an opportunity to try out things that otherwise she might not have attempted. Students also spoke of his high sensitivity to their needs and fields of interests, where Maggie for example said '*it happens time and time again actually, it's very obvious already on the course that he is very well aware of everyone's fields of interest*'. Most felt the formative feedback had helped both their learning in a general sense, and the completion of the assignment, although some felt it was primarily focused on improving the assignment. Here the detailed nature of the comments had surprised some, and one student criticized what seemed to her to be an '*obsession*' with spelling and grammar, again pointing to something new in this redefinition of the rules of assessment practice. For some, then, the new assessment regime seemed to have contributed to a more exploratory approach to learning, in which formative assessment was significant in allowing learners to understand how they can improve, and to embrace more challenging learning goals. The detailed level of formative comments suggests ways the tutor had brought to the surface the rules of the academy and tried to make these more explicit to the students, in ways which are discussed further below. However our students' surprise also suggests that in their experience of higher education these had mostly been left implicit, denying them the opportunity for critical engagement.

On the other hand tensions arose over the role required of students in response to this formative feedback. Previous assessment experience seems to have created normative expectations and sometimes dependence upon external academic judgement, creating tensions in their negotiation of the feedback, as well as potential vulnerability. For example, Ken spoke of giving a clear indication of grade to his own pupils, finding that from the formative feedback he couldn't tell if his

work needed *'almost shredding and starting again'*. He also represented his sense of dealing with knowledge within education, as less *'sharp'* or *'clear cut'* in contrast to knowledge within a scientific discipline (his first degree). Similarly, in relation to summative assessment feedback, some expressed insecurity in not knowing if their assignment had just *'scraped through'*. It seems also in some cases that the search for a normative positioning led to developmental aspects of the feedback, being overlooked. Indeed it might be wondered if the lack of normative feedback, rather than de-emphasizing comparison, paradoxically may have led some students to expend more effort on trying to position themselves with respect to others.

Another interesting issue in the context of formative assessment as a repeated rather than a one-off interaction, concerned the negotiation of the meaning of feedback over time. One student was aware of being told the same thing several times, before arriving at an understanding of what was at issue. From the other side, observation data show the tutor's awareness of having repeated advice that didn't seem to have been heard. In two cases where students spoke of uncertainties about their feedback, differences emerged over what was important, leading to revised understandings. One represented a continued dialogue with the tutor, in a mix of face-to-face and email exchanges, as important, while for another the moment *'when the penny dropped'* happened in a face-to-face peer and tutor review of issues arising from the assignment, when other students' reports and the tutor's formative feedback lead to new understandings. This emphasizes the potential educational significance of formative assessment enacted through dialogic encounters between the tutor and the students where voicing of the different perspectives was important. As can be seen in the examples above, this involved online and face-to-face interactions, in both individual and group settings.

In the particular characteristics of email as a cultural tool, its written and explicit nature adds a focus that our students suggest may not always be present in face-to-face tutorials, as well as giving time for reflection and interrogation of its contents in ways that are similar as those rehearsed for CMC (e.g. Salmon, 2002). It is also important in relation to formative assessment theory, as discussed below. So it allowed a better focus than face-to-face meetings, with its *'black and white'* nature making it:

as useful if not more useful than previous learning experiences I've had when I've actually gone into somebody's office or whatever... [...] And then you talk to somebody and you come out and you're not actually quite sure if you've actually got anything solid out of it.

(Eileen)

It allowed communications to be dealt with in your own environment and in your own time, a factor relevant both to those who lived within reach of the university as well as those who were more distant. Partly this was convenience and email seemed well embedded within most students' social familiar practice (although see below for exceptions and issues). Another student, reluctant to use discussion forums with peers he hardly knew, found email contact with his tutor very helpful, but their face-to-face relationship was at the heart of this:

when I'm getting email from John I'm imagining I'm talking to John. [...], I can almost imagine John's body language.

(Leo)

Although these students recognized the loss of body language that would be present in a face-to-face situation, they did not suggest that email was impersonal, in contrast to Wikeley and

Muschamp (2004). Instead the face-to-face relationship with the tutor could underpin and sustain the reading of the online communications.

This socio-affective element seems to have been crucial in the reception of the feedback and to the construction of the alternative assessment regime. Within the email message, tutors can shape the feedback; they can ensure the feedback begins positively, moderating the affective impact of the comments (one of our students commented on feeling ‘*affronted*’ by previous summative assessment which began in a negative way because of its mandatory pro forma structure). It contrasts too with the official nature of the summative assessment feedback form, requiring signatures and dates; the email can be more personal, and for example frequently ended ‘*Good luck, John.*’ In terms of its cultural associations, its low saturation with university connotations and context may be advantageous where previous assessment experience could make learners vulnerable, and may allow a more task-focused response, rather than criticisms being interpreted at a personal level. There seemed to be advantages for dealing with sensitive communications in your own space:

I'm much more amenable to what is written there, and I don't mean that in a negative sense. [description of busy working day] Whereas once I'm at home, got showered, we've had a meal together as a family, those things have passed, [...] I'm able to move on, so then I can pick up an email, you know, and then John says, oh actually that was rubbish, wasn't it, yeah [laughs], and I say, well, yeah, probably was actually, yeah. Not that he would write stuff like that, but you get the gist of what I'm saying...

(Ken)

This suggests that a lower element of social presence in email communication seems to add to the student's responsiveness to formative feedback, either reducing the likelihood of it being felt as personal criticism or to reduce its impact, were it to be perceived this way.

On the other hand discourse analysis shows its personal tone was moderated by some formality, so the authority of the academy was not wished away. So, for example, contractions were not used (e.g. *do not* appears rather than *don't*); paragraphing reflected distinct areas of comment. Quite explicit comments were made (e.g. ‘*If you do not bring this in much more centrally to your final write up, you will not meet the criteria for a pass*’), where such directness might be problematic face-to-face. However this example is unambiguous. Students mentioned instances in interviews where tutors could inadvertently provoke alarm with ambiguous feedback. Although the assessment criteria were invoked explicitly and sometimes rather forcibly then, there was no evidence of the personally judgmental language criticized by Boud (1995). The privacy and intimacy of email as opposed to the public nature both of peer and tutor feedback in face-to-face sessions and of peer feedback in the discussion forums seems important here. On the other hand email dialogue that was not shared with the group could not contribute to any collective consciousness.

In another aspect of the mediation of the electronic tools, by exchanging drafts as document attachments, the use of word processing features (e.g. *Track Changes*, or *Insert Comment*) allowed detailed comments to be made on aspects such as spelling, citation practice, language use, but equally on larger methodological issues, in ways which were not overly formal. However tensions emerged over the use of these tools: students were not always familiar with these features, so in one case because of this lack of shared competence, the feedback comments were

effectively lost. The ways that this IT capability can be used to dialogue with others during drafting processes seems an element of the IT environment which could be explored further.

6. Discussion of the Alternative Assessment Regime

What is striking within this assessment regime is the students' recognition not only of the usefulness of the tutor's formative assessment, but also the different extent to which the online peer activity was seen as beneficial for the development of a researcher identity or for their learning more generally. Importantly, by engaging in an email exchange of drafts for their subsequent assignment students signaled their valuing at some level of the peer critique of the cohort. The positive perceptions of their learning within this assessment regime, were countered by other aspects of their relationship with the academy which inhibited their learning however. In representing our understandings of the interactions which took place, we hope then to contribute to shared understandings of the learning context and the enabling or constraining factors within that, and to develop our own critique of the pedagogical discourses that were constructed.

Although our project has a particular interest in use of the internet in different ways to mediate assessment and therefore learning, It needs to be emphasized that this took place within a blended learning environment. It is therefore important to seek a holistic understanding of the assessment regime, resisting any temptation to ascribe too much to any particular tool or factor. The activity system as a whole is the focus of our analysis. As Engeström (2000:158); comments:

the researcher has to adopt a new view of mediation: instead of single instruments, one has to analyse a whole interconnected instrumentality [involving] not only multiple cognitive artifacts and semiotic means used for analysis and design, but also straightforward primary tools.

It is easy then to give primacy to the tools which have self-evident materiality (as well as policy-makers' attention), and to overlook the importance of the 'master tool' of language and the many interwoven forces which contribute to the system. Thus, we would argue that even where IT tools mediate an action, by far the more important cultural tool is still *language*. Nevertheless, in the following discussions, some element of selectivity is essential given the constraints of a conference paper. In the main then, our focus will be on the social mediation of individual learning involving tutor-student interaction, and on aspects of the mediation of the students' learning through cultural tools involving the internet where these seem significant.

6.1 The Role of the Tutor

The role of the tutor appears to have been pivotal within this activity system as a whole. This relates both to his own interactions with the students involving formative assessment, and to practices in shaping the instructional setting to facilitate participatory learning within the cultural milieu, including the online environment. This role is of course constrained by the academic context, whose rules and established cultural practices are deeply rooted and rarely questioned. However, knowledge of these practices and rules allows their interrogation, leading to the development of new understandings of what is possible, or what Engeström (2002) might call 'an expansive learning process'. The tutor can potentially play a key role in mediating the relations of the students with the academy with regard to assessment.

Turning first to examine his shaping of the learning environment, many different technologies and tools are in play here, whose design and use is substantially orchestrated by the tutor; an example would be the particular discourses he constructs (both in face-to-face and online environments) around issues of practitioner and researcher identity which seem critical for calling into being a way of conceptualizing learning. Students themselves recognized this, as in this response when asked what had allowed an exploratory approach to learning:

I think a large part of it, like I said, is the tone that John sets for the course. This issue of reflexivity which he continually emphasises 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.

(Hugh)

The 'tone' of the course also involves attention to the social relations which are at the heart of a social constructivist approach to learning, but which can be neglected in academic discussion. Salomon and Perkins (1998) for example in their discussion of different aspects of social learning, exclude the categories of 'learning to learn' and 'learning social content' (e.g. how to get along with others, maintain reasonable assertiveness) as a 'natural focus for development' (1998, p. 24). One could describe these two areas as the metacognitive and metasocial aspects of learning, and we would argue that developing an awareness of these in the learning context belongs within the tutor's role, where metasocial aspects in particular have been largely neglected. In the shaping of the environment then, a tutor has a key role in modeling the practices of an academic, and scaffolding the appropriation of this by his students. In what Vygotsky called the 'general law of cultural development', he speaks of the social origin of the development of human behaviour in this way:

The essence of the law is that the child in the process of development begins to apply to himself the very same forms of behavior which others applied to him prior to that. The child himself acquires social forms of behavior and transposes those on to himself... the sign originally is always a means of social contact, a means of influence upon others, and only subsequently does it find itself in the role of a means for influencing oneself.

(Vygotsky, 1960, p. 192, in Cole and Engeström, 1993, p. 6-7)

The tutor then, as a representative of the academy, can model its cultural practices in ways that are informed by an intimate knowledge of its rules and division of labour. In this setting discourse analysis suggests that this involved calling attention to his roles as assessor and tutor, while simultaneously invoking a model of learning as a process of becoming. His perception of his role here involved attempting to open up a discursive space where they might engage with academic discourse. This might be seen as allowing participatory learning, but at the same time it involves intentional instructional design. Different aspects of modeling are part of this practice; firstly an expositional element where he models what is to engage with academic discourse himself (as in the first online discussion forum); the opening of the discursive space represents an invitational element where the students are positioned as fellow researchers; and lastly an important reflective or deconstructive element, the metasocial aspects which we have argued are frequently neglected.. The discourse analysis and interview data suggest great differences in the students' understandings of these intentions however. Some had expectations of greater 'content' delivery, rather than a relationship involving dialogic encounters. Another saw his openness in sharing the discursive space as 'wanting to be part of the group'; at this early stage others valued tutor but not peer discussions. In relation to the reflective and metasocial elements, his discourses around

researcher identity seem also to have been heard differently across the cohort. In the quotation above Hugh demonstrates a reflexive engagement with this, but for others this element seems to have been much less important in their experiences within the module.

The second important aspect of the tutor's role which emerges directly from the above is the initiation of formative assessment. Students reported that this had noticeable benefits for their learning ways that seem to fulfill Vygotsky's view of good instruction, where it '*proceeds ahead of development, when it awakens and rouses to life those functions that are in the process of maturing or in the zone of proximal development*' (1956, p278, in Wertsch and Stone, 1985, p.165, italics in the original).² One student described these comments as '*flag-waving*', being short, almost '*throw-away*' remarks, opening up new avenues of learning, or ways of conceptualizing their research through adopting a case study approach, or critical theory. The tutor then aimed to raise a student's awareness of a particular framework for reconceptualizing and theorizing their studies, possibly leading to a higher systematization in the expression of their thought, but importantly requiring the engagement of the learner in taking forward such suggestions. We need to highlight also that to provide this formative assessment requires not only an investment in the student group so that he can shape the learner's 'prospective knowledge agenda (Newman et al, 1989), but also considerable substantive knowledge across a range of fields. (This contrasts strongly with the online tutor in Salmon (2000), seen as having little more knowledge than her students.) However, and this is especially relevant within doctoral work where students are likely to have extensive specific knowledge of the field, what appears more salient is procedural knowledge, including research methods, and pedagogical content knowledge (Shulman, 1986), which as Gutmansdottir (1995) points out, is about being able to collaborate to construct a narrative of the knowledge at stake.

On the other hand, comments also included what one characterized as an '*obsession*' with grammar and spelling, correcting small details within texts (using word processing facilities). This can be seen as an example of the ways in which attention is drawn in very explicit ways to the rules of the examining academic community, where the tutor plays a critical role in bringing these to the surface to allow students' to negotiate them in their learning. Here Sadler (1989, p. 124) discusses the complexity of qualitative criteria, describing criteria which are not 'sharp' but 'fuzzy', as being 'abstract mental constructs denoted by a linguistic term which has no absolute and unambiguous meaning independent of its context'. The importance then of *context* means that no fixed rules can be provided. Despite the oft-repeated maxim of writing on formative assessment that criteria should be made explicit, this is not a simple technical matter, but instead needs negotiated understandings over the course of the programme. As pointed out before, students' surprise at this level of detail in tutor critique also suggests that these rules are often left implicit. This range of formative assessment then aims to support exploratory learning, which nevertheless complies with the exigencies of the academic community and does not become 'utopian'. As a cultural tool it effectively aims to both constrain and enable learning, but as a tool is dialogic, inviting the response of the learner such that the learner shares the accomplishment of the assessment.

² The zone of proximal development was defined as the '*difference between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers*' (Vygotsky, 1978, p.86)

We might place the comments above on the convergent-divergent continuum of Torrance and Pryor (1998; 2001), where in convergent assessment the analysis of the interaction takes account of the curriculum, with a focus which contrasts errors with correct responses (as in drawing attention to academic writing conventions), whereas divergent assessment takes account of the curriculum and the learner, so rather than focusing on 'mistakes', it has a flexible, expansive element in which the learner has alternatives in the development of his learning (Torrance and Pryor, 1998, p. 153). It has a 'feedforward' approach, which elicits a response from the learner in a dialogic way; here students speak of '*major voyages*' of learning. This dialogic response cannot be assumed however, and students also represented moments where the intersubjective processes of assessment were not accomplished. Factors here seem complex, with students' implicit learning theories, epistemological beliefs as well as previous learning and assessment histories all seeming significant – these are discussed more below.

In summary, we might hypothesize that the most important cultural tool within this activity system is indeed the tutor/assessor, but importantly here this involved attention being paid not only to the cognitive but to the sociocultural exigencies which are in play in this particular context, including task and quality criteria.

6.2 The Value of the Internet for Assessment

Formative assessment seems then to have had significant benefits for some these learners and internet technology, here involving email communication was involved in this. However within activity theory, a distinction is made between the overall object of the activity system, actions which are usually at a conscious level to forward specific goals, but which themselves comprise operations which are unconscious, in ways that might resemble the skills that are used for riding a bike. In the illustration of Tolmie and Boyle (2000, p. 125) when using activity theory to discuss computer mediated communication (CMC), if the writing of an academic paper is the *object* of an activity system, the composition of a paragraph is a contributory *action*, carried out at a conscious level, while typing its words happens at the unconscious level of *operations*. The illustration itself is informative however. First, apart from greatly simplifying the number of goals that might be involved, it also assumes that 'typing', rather than 'writing' is an unconscious operation, and we may suppose (this is not explicit) that this also involves a personal computer rather than a typewriter. However this mediating tool has simply been assumed, fading from conscious view. If we shift the analogy to the activity system within the context of the EdD, the use of email and discussion forums for assessment makes similar assumptions.

Can we make such assumptions? One student spoke of an EdD computer workshop session as involving '*survival skills*', another of it being an '*out of body experience*'; this student writes rather than types, and internet connectivity is problematic; strong dislike of ICTs in general may have contributed to another withdrawing from the course. In the university context, previous research has suggested that IT infrastructure and academic IT skills development struggle to keep pace with change (Crossouard and Pryor 2004). On the other hand, for most students, the extent to which email was already embedded in their professional and/or personal practice seems an important part of its usefulness for them. Nonetheless, from the tutor's perspective, the overuse of email seems a potential limitation and during the research period there were instances of some communications between tutor and students being lost. This urges caution then. A sociological analysis of the value of email for formative assessment requires attention to the indexical and situated nature of its use, and is doubly essential in the light of the importance of social context for the negotiation of formative assessment itself demonstrated by Torrance and Pryor (1998; 2001).

Our interviews suggest great diversity in our students' experiences, which cautions against generalized assumptions. As Brown et al (1989, p.36) note,

'How a person perceives an activity may be determined by tools and their appropriated use. What they perceive, however, contributes to how they act and learn. Different activities produce different indexicalized representations not equivalent universal ones'.

Nevertheless, our research also provides evidence that the discursive construction of ICT skills as indispensable in today's society makes any representation of a need for IT support and assistance problematic. As Woolgar (2002, p.7) points out, we need to avoid the 'sweeping grandiloquence' of many rationales for information technologies, and instead 'focus much more on bottom-up experiences, on the nitty-gritty of actually making the damn modem work'.

All the same, in the use of email as a tool for formative assessment, a particular feature of interest is its fit with theories of assessment and learning which would value a dialogical cycle of interactions between student(s) and tutor. An important aspect of this cycle is the encouragement by the tutor for the learner to engage with the task criteria, and to relate these to their own production. At the same time tutor feedback involving divergent assessment attempts to open new avenues of learning as described above, but requires the reflective engagement of the learner and the relation of new concepts to their own context of learning. This might create then a zone of proximal development, which would not be possible if the student were working alone. We see firstly that the tutor has a role in raising the rules and division of labour in the lower part of the activity system out of obscurity so that students can engage with them, and can use them to shape rather than hinder their learning. However, his collaborative involvement with the student also challenges a division of labour, where students construct their knowledge alone, and bring this to the academy for summative appraisal.

Although these processes can be carried out in a classroom setting, they are clearly complex and demanding for the tutor or teacher (Torrance and Pryor, 1998, 2001). If teaching is seen as having the aim to incite the student to intellectual action, the fast-moving classroom environment has advantages for collaborative engagement, but is less propitious for reflection. So while the collaboration of the tutor and students might be seen as involving the active production of a text, this is ephemeral in nature and may have few tangible and revisitable traces when the hurly-burly of the classroom is over. Indeed, with one exception, the face-to-face workshops did not figure in critical moments of learning represented by these students. It was also noticeable in student interviews that none recognized formative assessment as occurring during face-to-face settings, despite this being the pedagogical intention of the tutor. The particular advantage of email in this blended setting might lie in the time and distance separation between the task elaboration, the feedback and the task revision. This allows more time for reflection, with the written nature of the feedback affording a more penetrating interrogation and potentially greater internalization by the student. From the tutor's point of view, time for consideration of the individual student's needs, the resources which might be useful, and for attention to the language used in his message would seem important. In a climate when academic tutoring time comes under many pressures, it may also let the tutor engage in more fruitful way with the cyclical development of students' learning narratives; occurring during the development of texts, it can contribute to an ongoing dialogue of learning, involving reflection and action. This might be contrasted with summative assessment, which may contribute to reflection, but does not necessarily contribute to action.

In addition, two learners who used email routinely spoke of feeling more receptive to receiving critical feedback by email than in face-to-face settings, suggesting that comments were felt in a

less personal way. Kluger and DeNisi (1996) have proposed that receiving feedback verbally involves the salience of the other person, and can decrease attention to the task being communicated, which is not the case for written feedback. We suggest then that email may have a particular advantage in allowing mediation of assessment feedback in settings which are *potentially* in the control of learners, and where the socio-cultural baggage of the university may be less forcefully felt.

In addition, the particular blend of internet and face-to-face tools in this setting seems important. Although not discussed in detail here, the peer assessment conducted through the website discussion forum seems to have contributed to the emergence of peer relations which are more propitious for collaborative learning, with email peer assessment being taken forward at the instigation of the learners themselves. Although the face-to-face meetings are of central importance for the development of peer relations, the website has also been represented as a useful centre for the programme, described using metaphors such as a 'one stop shop', 'our student bar', or (as below) a 'town hall'. Aspects of this are related to convenience, with the website as the 'quickest way in', but other aspects seem to relate more to an identity consolidation, providing a sense of 'being there' in relation to the programme, the cohort and the institution, and which the peer activity has also added to for some. One described the effect of the online interactions in this way:

The whole formative assessment and the work with peers and tutors in terms of the email exchange is also very useful. It's very nice to have a community of practice, a sense of community of practice or community of learning. Whether or not.. regardless of how much I used the website, it's nice to have it there, if you like. It's a town hall you can go to, if you know it's there then that's nice. [...] It makes the bond stronger with my colleagues which is a nice and important thing and I like that.

(Hugh)

Given the importance of the social interactions for the learning of the cohort, this then seems valuable in itself, even if the suggestion might be that this is to some extent an illusion of a 'centre', it seems an enabling illusion. The website then contains the discourse of the cohort, and provides an embodiment of it which the students can draw upon in developing new identities.

Apart from the usefulness of individual tools, the blend of face-to-face workshops, the public nature of the discussion forum, and the private correspondence possible through email seems to have been useful although in very variable ways for individual students. Salomon and Perkins (1998) in their discussion of the individual and social aspects of learning recognize that while all individual learning is social to some extent, the particular context of learning will vary considerably in the ways that it allows 'active social mediation'. In the context of the EdD, the structured use of internet technologies seems to have created the potential then for greater social mediation of learning in ways that fitted with the ethos of the programme, although this was always in tension with the limited time available in these professionals' lives.

The interplay of private and public fora may also have been helpful for the progressive development of ideas towards their final representation in the assignment. Used in the structured way described above, the blend of discursive fora may assist in the transformation and relocation of internal to external representations, from a private space to a public place, where for example a mental model or concept might evolve through workshop discussions or personal reading, be

moved to personal notes, or diagrams, and then to more public and shareable representations. Here one could see the initial drafts and comments in the discussion forums as being part of such relocation, with private email discussions exploring ideas that were less well formulated (described by one student as '*off the wall*') happening alongside them, and then in the discourse chain around the assessment cycle progressively developed in dialogue with peers and tutors in ways which allowed the appropriation of the discourse of the academic community. This resonates with Bakhtinian ideas of inner speech, taken up also by Vygotsky, and the dialogic play between interpsychological and intrapsychological functioning of language, where the different fora create discursive spaces which make the 'concept of an audience visible' (Cazden and Forman, 1985:329) and where emergent ideas can be formulated and explored in dialogue with others. For collaborative learning then, the blend of private and public electronic discussions, including peer and tutor assessment, and here carried out through discussion forums and email, seem to have been beneficial for some learners, but not all.

Our study also highlights the variable experiences our students, so no necessary effect of the use of any particular tool can be assumed: instead these have different advantages at different occasions for different learners. Examples of this emerge from the moments which students represented as critical in their learning, where in one example a student realized he was approaching his assignment '*the wrong way round*' during a face-to-face workshop involving tutor and peer discussion of issues emerging from the assignment. In another case it was a combination of email and face-to-face tutorials that was significant. It appears that a mix of media is advantageous, and that for some students, face-to-face engagement is still of primary importance.

6.3 Factors shaping students' engagement with formative assessment

Torrance and Pryor (1998; 2001) have described formative assessment as a dialogic 'intersubjective accomplishment' where the student therefore has a major part to play in responding to the exploratory, even provocative comments of the tutor, who is attempting to teach within a zone of proximal development. The student also has an important role in the initiation of assessments, and so developing the ability to become self-monitoring in the course of one's production (Sadler, 1989). This section reviews factors which seem influential in shaping students' engagement with this dialogical view of formative assessment.

Within the cultural-historical approach, cognition is seen as distributed in time, meaning that human sociability involves the ability to reach into the past, draw on this cultural past, and project this into the future so that beliefs are engendered that then inform and constrain present action (Cole and Engeström, 1993, p.21). So the different subjects within an activity system bring with them their personal narratives, which both enable and constrain their actions. In our context a significant aspect of these personal narratives is our students' previous experience of learning and assessment. For some, previous assessment careers seem to have encouraged a more passive relationship to assessment, where students were recipients of it, and where uncertainty over normative positioning contributed to insecurity within this new regime.

Dweck's (2000) notion of goal orientation seems influential here; this would distinguish between learning and performance goals, where adopting a performance goal involves seeking positive judgements of one's ability, and avoiding negative judgements, whereas learning goals involve increasing one's competence, mastering new tasks while accepting the risk of making errors. This

should not be understood to imply that performance goals are inherently 'bad'; Dweck (2000:151) makes clear that 'both goals are entirely natural, desirable and necessary', but rather that prioritising performance goals can impede learning. She also notes the potential vulnerability of those with performance orientation, as failure can be taken as a personal indictment, rather than as opening up an area of development. Within the interviews comments reflecting memories of pain associated with assessment would suggest that for some assessment has indeed been experienced in this way. Dweck suggests that performance orientation is encouraged through competition and normative grading. All the same there is a danger in reifying goal orientation and ascribing it unproblematically to individuals. Seen in more social light and understood as constructed socially through interaction in different contexts it becomes less stable both contributing to students' social practice and recursively produced by those practices (Pryor and Torrance 2000).

Within the EdD programme most students are undoubtedly in a situation where their time is pressured, so in this particular programme it seems these goals are more than likely to come into conflict. This highlights the importance of pedagogic activity design, but also adds to the need for engagement with task criteria to allow students to manage the performance aspects of their learning better. Convergent formative assessment focused on task criteria has a major role to play then, if exploratory learning is to be possible in this setting.

The very varied professional roles and sociocultural backgrounds of the students could also have been influential in the relationships these facilitated with the academy. Some seemed better positioned than others to draw upon a familiarity with the institutional setting, and to develop their voice within it from the beginning of the programme. For others, there was greater uncertainty about its rules and division of labour. A sense of otherness and distance from the academy could engender an over-reverential attitude towards it and its representatives, impeding a dialogical engagement with formative assessment. This suggests the important role a tutor plays in constructing relationships which might overcome this distance, although these sociocultural factors can obviously never be assumed to be within their control (James, 2000). It seems useful on the other hand that tutors be more aware of their importance.

Students' own theories of learning, whether explicit or implicit, may also be influential, so for example the extent to which learning itself is seen as a process of information transmission, rather than a process where knowledge is socially constructed, where an expectation of the academy to provide 'content' could lead to a reliance on the tutor as the content expert. This is not to say that tutors do not have substantive knowledge, but rather that knowledge construction involves a dialogic response, where space is left for students to engage themselves with substantive issues. Some evidence emerges from the interviews suggesting that learning might be implicitly seen as involving information transmission, and earlier learning career would be a factor here again. This would also affect the importance attached to peer engagement, if peers were not seen as having relevant experience and expertise.

The extent to which previous learning experiences have been within social sciences, as opposed to scientific disciplines, may also affect a learner's understandings of feedback, where the fuzziness of social science knowledge could perhaps be disconcerting for those who are used to knowing knowledge as 'right' or 'wrong', with the relative security that this might bring as in the example quoted above. Some students appear to look to the tutor to judge their work in a convergent way,

i.e. is it right or wrong. It is suggested then that where such expectations exist, this will complicate understandings of divergent feedback, which expects a more dialogic response.

In conclusion, the students' different assessment careers, involving their previous assessment and learning histories, implicitly held learning theories, goal orientation, and their socio-cultural backgrounds can be seen as shaping in profound ways their interactions with the particular assessment context of this programme, (Ecclestone and Pryor, 2003).

7. Future Directions

Although educators themselves, our students typically did not seem to have highly developed theoretical understandings of formative assessment or to share the theoretical position of the tutor. Particularly with a group of students at this level, and where many are educational practitioners themselves, it seems important to further the dialogue over the educational practices they are participating in, and the learning theories that underpin them, so that their critical engagement might loosen attitudes to assessment which could undermine their learning. The sharing of these tentative research findings will be important for the development of our own understandings, but may also be useful for our learners in their ongoing deconstruction of the EdD as a social practice, which of course has been encouraged as part of the module teaching. This could perhaps be seen as the first steps towards an 'expansive reconceptualization' of the learning setting and of the current assessment regime (Engeström and Cole, 1993), where rules and division of labour which are often left implicit are brought within the scope of their critical gaze. In this sense the cycle of the research is clearly not yet complete.

At a wider level, a more critical approach to 'assessment for learning' would seem desirable, particularly in light of the ways in which research on formative assessment can be subsumed within a performative model of education. Here for example Tunstall (2003 p.518) expresses unease about the ways the work of the Assessment Reform Group (1999) has been embedded within English schooling in service of raising levels of attainment. Certainly a strong focus on grading in association with formative assessment fundamentally contradicts the deeper theoretical position of Torrance and Pryor (1998; 2001) which would attach importance to local meaning-making and where teaching about the test (rather than teaching to the test) would ideally also involve its critical deconstruction at the same time as negotiating understandings of task criteria and quality.

In the academy today the challenges posed to assessment practices both by postmodern writing (see Torrance, 2000) but also by sociocultural learning theories, have yet to be met and seem to represent the most fundamental of tensions within this setting. However the collaborative and negotiated nature of formative assessment as described above seems to have a sounder theoretical foundation within these new understandings than an over-reliance on summative assessment procedures which demand that you 'stand alone with your knowledge' as one EdD student put it. Formative assessment has also been welcomed by these students. This kind of tutoring requires however a re-thinking of the role of the tutor, the skills needed, and the student-tutor relationship. In the context of higher education in the UK, a serious tension arises between the high priority attached to research alongside the long-term reduction in funding for universities, where teaching has to jostle with these other important demands. In such a context the engagement of the tutor that was evident in this study cannot be supposed universal, however desirable it might also be.

It seems that the use of internet technologies has been helpful for some, within the overall environment of this particular programme. For others its benefits have been minimal. The significant role of sociocultural factors in shaping different students' abilities to benefit from formative assessment suggests that technology may not be the most important factor within these new assessment relations. It points instead to the complexities of collaborative learning at this level and to the importance of pedagogy in designing a learning environment which can support the widest spectrum of students at this level.

8. Conclusions

For some students, the alternative assessment regime appears to have allowed an exploratory approach to learning where mistakes could be conceptualized as opportunities to learn. Striking evidence of the formative assessment by the tutor opening up major areas of learning arise from the interview data, where economical feedback becomes 'feedforward' for the learning. For all students, the level of formative assessment was a new experience in their education, and all found it useful. In this context, some students felt that email interaction had particular advantages as a medium for tutorial interaction. The online peer activities appear to have enabled some students to overturn relations in the classroom that had inhibited participation; for others, the benefits lay in a sharing of knowledge developed through their own activities as researchers. However, participation in the online peer assessment was uneven, and for a minority of students it was not felt helpful.

The factors that seem to underpin this differential success appear to be role of the tutor in 'calling into being' the assessment regime, and in setting the tone for the programme. A combination of convergent and divergent assessment seems to have potential in this environment for allowing exploratory learning while limiting the risk that the pressured student environment might encourage an instrumental approach to learning. In relation to the online aspects of these interactions, there seem to be advantages in email and discussion forums for allowing a heightened metasocial and metalinguistic awareness, which may be helpful in a critical engagement with the discursive practices of the academy. Above all a new conceptualization of learning within this activity system where it is seen as a collaborative venture might overturn the hegemony of summative assessment which constantly positions the tutor and learner in adversarial relations.

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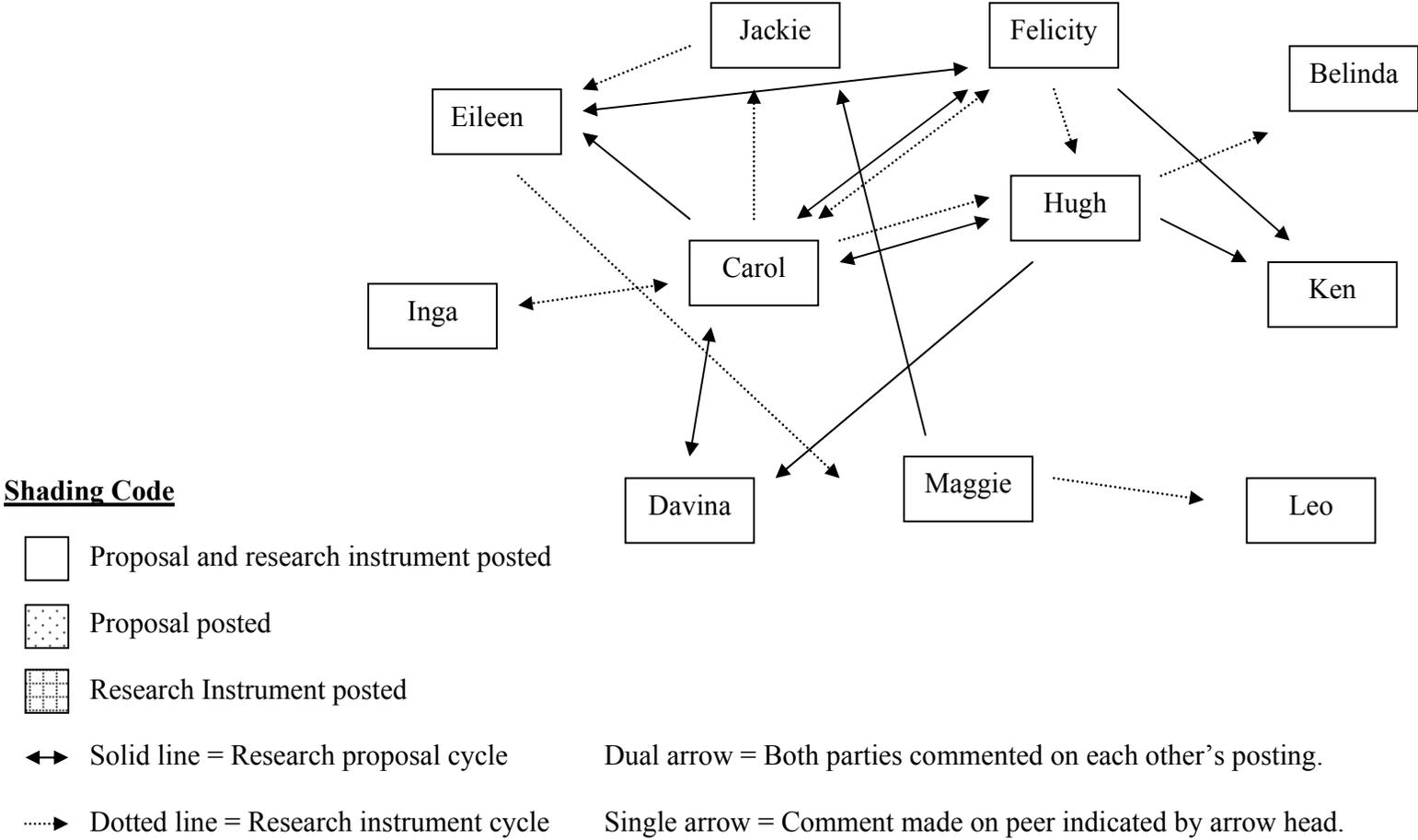
Appendix 1: Schedule of Online Activities

B. TIMETABLE FOR THE WRITING AND FORMATIVE ASSESSMENT PROCESS

This table gives you a guideline to the way that you can maximize your support on from both peers and tutors for the process of developing the research for your second assignment. Obviously the timings may need to be different for individuals depending on commitments and access; however, it would be useful to bear this time scale in mind when planning your project.

Activity	Deadline
Decide on focus and research Qs	Process started during Workshop 1
Choose method	
Write a research outline/proposal	
Complete draft proposal and upload onto website for peer review/suggestions	1 February
Give feedback on at least one other person's proposal	7 February
Make any amendments and email to John Pryor	8 February
Receive feedback on outline	13 February
Design draft instrument and upload for peer review/suggestions	7 March
Further time to discuss and refine ideas	During Workshop 2 (20-21 February)
Give feedback on at least one other person's instrument	6 March
Make any amendments and email to John Pryor	14 March
Receive feedback on Instrument	19 March
(Trial instrument = collect and analyse data and appraise instrument) Use refined instrument	
Submit draft to tutor	Negotiated with tutor
Receive feedback from tutor	Negotiated with tutor
Submit finished assignment	22 April

Appendix 2: Diagram of Online Peer Assessment Activity



Appendix 3: Tabular Representation of Online Peer Assessment Activity

	Proposal Posted	Comments From	Comments Made To	CR	CM	Instrument Posted	Comments From	Comments Made To	CR	CM	Total CR	Total CM
Eileen	Yes	Carol Felicity	Felicity	2	1	Yes	Jackie	Maggie	1	1	3	2
Carol	Yes	Davina Hugh Felicity	Eileen Davina Felicity	3	3	Yes	Inga Felicity	Jackie Felicity Inga Hugh	2	4	5	7
Davina	Yes	Carol Hugh	Carol	2	1	No			0	0	2	1
Ken	Yes	Hugh		1	0	No			0	0	1	0
Felicity	Yes	Carol Eileen	Ken Eileen Carol	2	3	Yes	Carol	Carol Hugh	1	2	3	5
Maggie	Yes		Jackie	1	0	Yes	Eileen	Leo	1	1	2	1
Jackie	Yes	Maggie				Yes	Carol	Eileen	1	1		
Hugh	Yes	Carol	Ken Carol	1	2	Yes	Felicity Carol	Belinda	2	1	3	3
Belinda	Yes			0	0	Yes	Hugh		1	0	1	0
Inga	No			0	0	Yes	Carol	Carol	1	1	1	1
Leo	No			0	0	Yes	Maggie		1	0	1	0

Abbreviations used in table heading:

CR = Comments received

CM = Comments made

