

Tutor roles in Facilitating Reflection on Practice Through Online Discussion

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ABSTRACT

This paper is concerned with teaching and learning in a blended e-learning course that supports students in reflecting on and transforming their practice. In this paper we focus on two key aspects of the online learning environment: (i) the selection of the topic of discussion (the discussion question) by the tutor and how this influences the quality of the discussion; (ii) the interventions of the tutor within the online discussion. The aim is to understand why some online discussions 'take off' in terms of numbers of postings and quality of engagement whilst others are less successful. Our findings show that the nature of the question impacts on discussion outcomes and that it is therefore important for tutors to pose a range of different types of questions to students in line with learning objectives. If the tutor structures discussion and chooses questions carefully there may be less need to intervene to stimulate discussion or keep it on track than is sometimes assumed. This shifts the role of the tutor somewhat toward more preparatory and plenary work with less tutor participation required to support the development of discussion skills amongst students, particularly during later stages of the course.

Keywords

Tutor Roles, E-moderation, Dialogue and learning, Online discussion groups

Introduction

From a socio-cultural perspective, talk is a key foundation of learning; language and thought are closely bound up with one another and both cognitive and affective development are strongly influenced by opportunities to talk. Vygotsky himself (1978) viewed children's development as a dialectical process involving interaction between the natural and social world and language as being essential in this process. This socio cultural view of learning extends to adult learning where research supports the view that dialogue is important and that the learning experience is enhanced when students regularly participate in discussion (Kolb, 1984; Laurillard, 2002). There is much research focusing on how encouragement of discussion and collaboration in education increases student involvement, engages students more in the learning process, and promotes student achievement and satisfaction (Clark, 2001; Hung & Chen, 2001; Garrison & Anderson 2003; McConnell 1994). For many distance-learning courses, overcoming distance is a real challenge, and well-managed learning conversations are therefore also considered an important tool for strengthening relationships between students (Jones, 2004; Laurillard 2002).

The research literature is clear, however, on the fact that merely forming a discussion group and providing the technology will not lead to learning. There are a number of variables and factors that contribute to whether any teaching and learning environment leads to learning (Salmon 2000; Laurillard 2002). The composition of the group and the roles participants undertake in the group affect the effectiveness of discussion (Guldberg & Pilkington, 2006). Opportunities for alternate forms of interaction such as time to work on task and time to develop online relationships are also important (McConnell, 1994). The nature of the tasks and/or discussion questions themselves, including the preparedness of students for undertaking tasks and their assigned discussion roles also need consideration (Salmon 2002; Desanctis & Gallupe 1987). All three are central to achieving learning objectives.

In relation to the choice of task, researchers have found that the nature and specificity of the task influences the kinds of interaction or collaboration that takes place, in turn affecting outcomes (Henri 1992). Studies have also shown that students of all ages learn better when they have a sense of engagement in or ownership of the learning task (Schön, 1983). Yet, however important the task is, there seems to be consensus that, social as well as cognitive interaction

with both instructors and peers is also important in enhancing active participation and learning (Gibson et al. 2006; McConnell, 1994). It has been argued that the social climate can also have an effect on motivation, levels of confidence and hence engagement (McConnell, 1994).

Research from other sources has shown that when attempting to create an effective discourse community in a networked learning context it helps to structure debate. Discussion is also likely to be more productive when someone monitors discussion, facilitates interaction and summarises outcomes (Berzsenyi, 1999; Veerman, Andriessen & Kanselaar, 2000; Goodyear, 2001). A key concern in enabling learning to take place is therefore the role of the tutor and the balance between teacher and student participation. Research has highlighted that the role of the tutor in the online environment needs to be one in which the conditions for friendly and constructive debate are nurtured by establishing ground rules for collaboration and encouraging students to participate and adopt for themselves roles that they may at first think are the tutor's responsibility (Salmon 2002; Pilkington, 2003; Pilkington & Walker, 2003; Pilkington & Kuminek, 2004). The facilitation problem then becomes one of monitoring discussion and intervening to ensure meaningful outcomes without inhibiting discussion. There are some roles which even students in Higher Education still attribute to the tutor and may be reluctant to take on themselves, particularly when the tutor is present. Such roles include making sure the focus or direction of the discussion is maintained within the timeframe of the discussion in ways that ensure all the elements of the task or question are addressed (managing the task). Students can also be reluctant to engage in directly questioning or challenging another student's point of view and may regard the kinds of feedback comment which validate or critique other students' contributions as the tutor's job (Pilkington, 2003).

Although it is possible for teachers to model effective dialogic techniques, active teacher participation can also limit the kinds of contribution students make and their opportunity to develop ownership of discussion-management and constructive critiquing roles (Mercer, 1995; Pilkington & Walker, 2003). Reasons for this are not fully understood but in addition to reluctance to take the (perceived) role of the tutor there may also be a fear of exposing a lack of knowledge in front of the teacher. However much this is counteracted at tertiary/ adult levels, by increasing student confidence and autonomy, the effect may still be real.

Further research is needed in order to determine how the role of the tutor influences discussion and to gain further insight into what factors contribute to creating positive environments for online interaction. We aim to contribute by focusing our research on the extent to which the topic of discussion and the role of the tutor influence the nature of discussion. The aim is to understand why some discussions 'take off' in terms of numbers of postings and quality of engagement whilst others are less successful.

Research Design and Methodology

The research described in this paper is part of a larger case study. The case study is an observation of real life events that are not controlled (Yin, 1991) with the central characteristic being that it concentrates on a particular case studied in its own right in a specified social or physical setting (Robson, 1993). In this study, the case study is the University Certificate (ASD) course, its learning environment, students and teachers. The course has a large number of students who are studying at undergraduate level (a cohort of 265 per year). These are non-traditional students who are studying by distance, part time. Most are working full-time whilst studying, or are parents caring for a child or adult with an Autism Spectrum Disorder (ASD). The course philosophy advocates an eclectic approach to theory and practice when working with the person with an ASD and also seeks to develop students' abilities in teamwork, problem solving and observation. The particular case study was selected in part due to some unique properties relevant to investigating the development of community of practice amongst learners (Lave & Wenger 1999), with course aims aligning authentically with the phenomena we wanted to study - learning to become a community of reflective practitioners.

We emphasise the unique learning environment available for us to research here. The rich teaching and learning environment combines online presentations and discussion through WebCT (the institution's Virtual Learning Environment) with CD ROM audio and visual material as well as printed module readers. Students are divided into regional tutor groups run by a local tutor with approximately 10 students per group. Students participate in face-to-face discussions with the regional tutor and each other, but also participate in online discussions. The two

geographical tutor groups combine to make one online group. All online groups have similar numbers of students in them, ranging between 15 and 20 students per online group. Two tutors work together in each online group to facilitate debate and discussion and also to help support one another. Due to the high number of students on the course, there are 13 online groups in total. All these 13 online groups discuss the same questions on the bulletin boards at the same time but within their separate online groups.

The collaborative online small-group discussions are integrated with the wider online, CD ROM and other teaching resources. The pedagogic aims of these regular discussions are to create a student centred learning environment with a focus on collaboration, communication and active learning. The regional tutor has a unique role here in taking a non- interventionist approach, mainly introducing and summarising discussion and only intervening when there is a perceived specific need. The role of the tutor is to welcome and support students, particularly in the beginning stages but then, to encourage students to engage in dialogue with each other. Each discussion is open for two weeks and at the end of the two weeks the tutor summarises the discussion and signals to students that it is time to move on.

Previous research in relation to this case study has focused on in-depth qualitative analysis of the discussion transcripts of the tutorial group having the modal number of postings to the bulletin board (Guldberg & Pilkington, 2006). Emergent themes included how students belonged to a community of practice in which commonalities and differences were established between group members as part of a process of developing group identity; conversation as a source of empathy and support; the exploration of alternative and contentious viewpoints and their degree of resolution and development of common group values. Further themes included the notion of overlapping communities of practice and the use of the online conversation to mediate in renegotiating roles and practices in boundary communities such as the family, school and workplace.

In the current and ongoing stage of research we are extending previous analysis to compare data from the mode group with data from the lowest and highest posting groups. We chose a sample of bulletin board discussions from those three groups with the view to combining quantitative and qualitative analysis of the data. The sample for this research was six separate bulletin board discussions over a period of six months in the three different online groups, resulting in a total of eighteen bulletin board discussions. To give a sense of the size of the sample it amounted to a total of 408 bulletin board postings, with a corpus of 70,422 words. Group A was the lowest posting group with 78 postings. Group B was the mode group with 135 postings and Group C was the highest posting group with 195 postings. Each discussion took place with three weeks between each other.

In determining our coding framework, we first focused upon identification of themes to aid the organisation, management and understanding of the text data. The goal was to work with the text coded at a topic and to pursue enquiry by rethinking and recoding as new meanings are reflected upon. The process of coding was a subjective and qualitative one drawing out themes and concepts described by the participants. We analysed the data in depth, revisited themes and issues, and looked for new emerging themes or patterns, including relationships and differences between themes.

We also applied exchange structure analysis developed by Kneser et al. (2001) as an adaptation of Sinclair and Coulthard's work (1992). This involved analysing whether a message was initiating a new thread of conversation or whether it offered a response to an ongoing thread or re-initiated through a request for clarification, refinement, challenge or justification. In continuing to look for indicators of deeper engagement as described above, we decided to code all the postings according to whether the post was best described as a monologue, a response to a previous posting, or a re-initiating turn thereby enabling us to focus on the distribution of different types of discourse. We chose each complete message as the individual unit of analysis as this enabled objective identification of units and clarified the number of observed units for analysis purposes. This is also in keeping with the 'unit' as defined by the author of the message (Schellens, 2006). The issue of determining the impact that the type of discussion topic or question was measured in two ways: firstly according to the quantity of postings generated for each question across all groups; and secondly according to the distribution of the type of postings across the three groups. We collated all postings from tutors and analysed those postings in detail according to the themes of welcoming and affirming, instructing and modelling behaviour, intervening when necessary, challenging and giving feedback. Names of students and place names have been changed to preserve anonymity.

Results

The nature of the question

Looking at the overall data in terms of numbers of postings, they ranged between 490 and 1,266 in total across the 13 groups. There was a drop in quantity of postings over time in all groups with a greater drop between Module 1 and 2 than between Modules 2 and 3. The lowest number of postings in any one single discussion was 12 (with the exception of TimeToTalk 7 where there was a low number of postings across all groups due to the website servers being down). This indicated that despite there being a drop in postings over time, there were still sustainable numbers of postings for dialogue to take place in all discussions, with some discussions taking on the character of lively debate.

The number of postings and the nature of the discussions indicated a committed student group where most students participated if not all the time, then at least most of the time. Analysis of the discussions also showed that students largely adhered to the topic and focused on answering the question set. A count of the number of topic units corresponding with the question topic amounted to 92% overall.

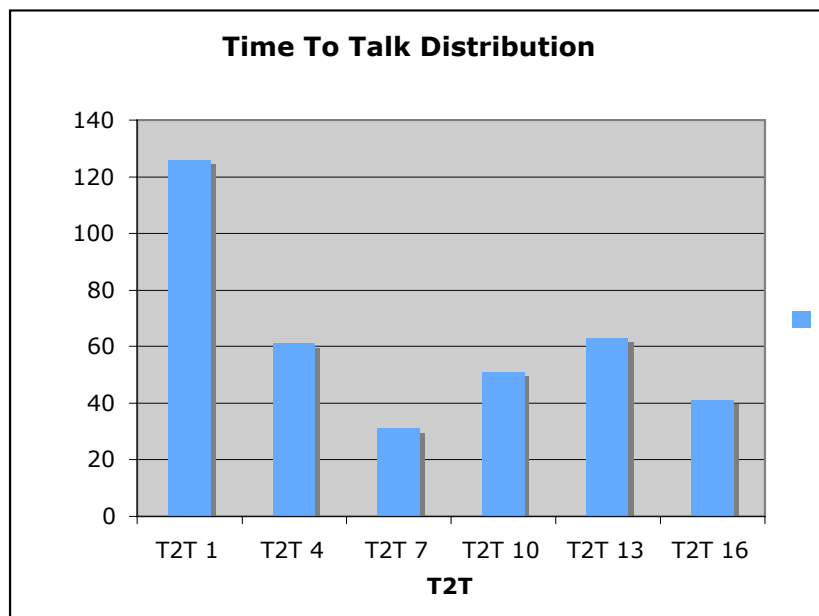


Figure 1. Quantities of postings across the three tutor groups:

In terms of the number of posts and the level of engagement with particular discussion topics it emerged that irrespective of whether the group was overall low, medium or high in number of posts, some discussion questions attract fewer posts across all groups (see figure 1). The wording of some of the discussion questions or tasks can be found in figure 2. In terms of quantities of postings, we see that the first discussion attracts significantly higher number of posts than the other discussions. TimeToTalk 4 and 13 had the second highest numbers of postings. The questions that attracted the fewest postings (with the exception of TimeToTalk7) were TimeToTalk 10 and 16.

We realise that purely measuring the number of posts would give us limited insight into discussions so this was complemented by examining distribution patterns of postings according to whether they were monologues, responses or re-initiates (see figure 3). The overall discussions were characterised by a substantial number messages being either monologues or responses (see figure 4). In fact, in all three groups those two different types of messages accounted for between 67 and 98% of the messages in each discussion. The first discussion had a higher number of responses and re initiating moves across all groups. TimeToTalk 10 had a lower number of 'monologues' and higher number of 'responses' in all three groups, indicating that students were responding to one another but the discussion

was lacking in re-initiating moves in those discussions. TimeToTalk 16 showed similar patterns although this discussion was characterised by proportionally higher levels of monologues. TimeToTalk 4 was particularly characterised by a high number of monologues, particularly in two of the groups. This discussion read more like a series of individual reflective contributions than a discussion but could be important to students who appreciated the opportunity to share these reflections and felt they learnt from them. This discussion asked students to observe someone for 5 minutes and then to write down their observations. TimeToTalk 13 had more even balance, with some reinitiating moves in two of the groups.

Time to Talk Questions
TimeToTalk 1. Comment on whether you believe diagnosis is important or not. Think about an individual whom you care for or work with. Would it affect them whether they had a diagnosis or not?
TimeToTalk 4: Observe someone (it does not have to be someone with an ASD) for 5 minutes. Write down all the different ways they communicated in the time you observed them. Comment on whether they used language to communicate throughout. Did they communicate in other ways too? For example by using body language, facial expressions and other non-verbal communication?
TimeToTalk 10: Peeters and Jordan (1999) finish their article with the following words: "Amor NON vincit omnia. Autism is different". (Love does NOT conquer all). In your own words, comment on what you understand by this statement in the context of the article and whether you agree with it. Do you agree with the notion that carers and practitioners in the field of ASDs need to have characteristics that make them 'qualitatively different'?

Figure 2. The TimeToTalk Questions

Monologue
Group C, TimeToTalk 1, Linda: I work in a large special school, which has several classes for pupils who are diagnosed with an ASD. Without a diagnosis pupils cannot access this specialist provision and are placed in other provisions. We now have strict policy guidelines on staffing ratio and the staff work closely as team to maintain the ethos based around TEACCH, PECS and Intensive Interaction. We also have weekly Speech and Language Therapist (which other pupils in school access but in a more ad hoc manner than ours) Therefore the provision and resources for students with autism is in my own experience better than without a diagnosis.

Response
Group A, TimeToTalk 4. Elaine: I agree with Pat about the language and communication developing separately for those individuals with ASD. My son has good language but still needs help with the communication side. I write things down for him or use pictures with words and also he will write down stuff especially if he is anxious. I feel this helps him to understand more of what is happening at that moment.

Re-initiate
Group A, TimeToTalk 4, Maria: Where you mention looking through a window and still being able to judge the tone of the conversation reminds me of the clip on video of Karen Guldberg speaking in Norwegian. When I first listened and watched I could tell it was instructions but could only guess at one word "book". I knew she was giving instructions from the tone of voice and the spacing between sentences, but could not work out what the instructions were for. On the second clip where she used hand and body gestures I could see that it was some kind of bedtime routine and worked out that you needed to brush your teeth, read a book, have a drink, and go to bed. It wasn't until she used the symbols that I realised it was bath, brush teeth, have a story, have a bottle, and go to sleep, and that this related to a baby. It has really made me think about how my R must find it so confusing at times when just language is used and especially when she might be anxious due to sensory difficulties. I believe it will be most beneficial to use symbols at certain times as an aid to helping her understand. After all we are speaking a kind of foreign language to her, and even if she can pick out a few words the meaning may still be lost to her. What do other people think?

Figure 3. Examples of different types of discourse

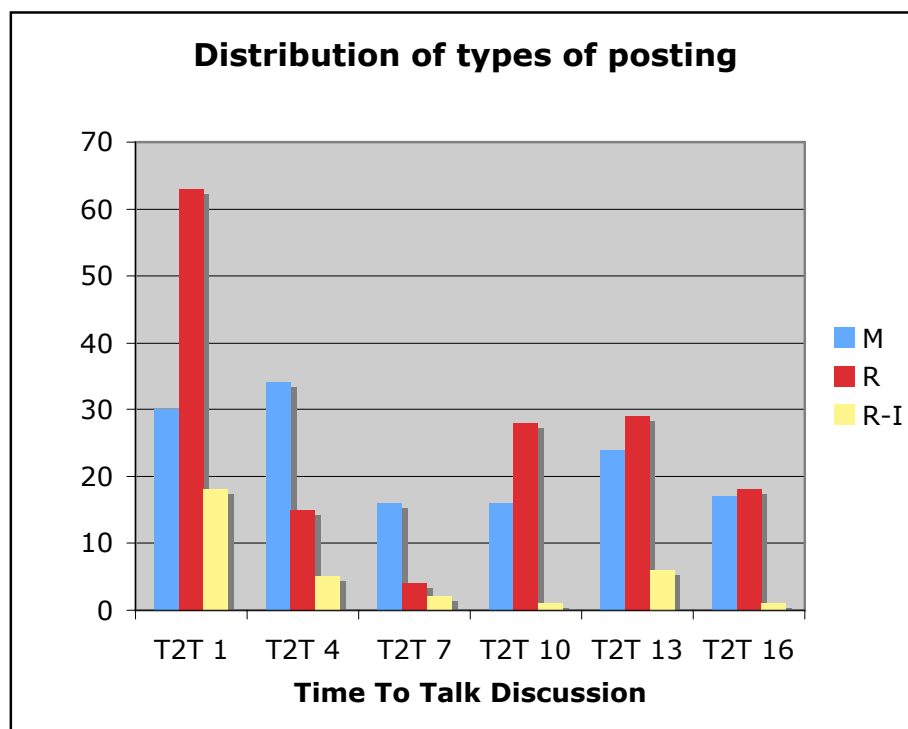


Figure 4. Different types of postings across all three groups: Monologue (M), Response (R) and Re-Initiate (R-I)

There was limited amount of disagreement between students. Out of the total 18 discussions, there were only two discussions that lead to any disagreement or slightly differing perspectives being put forward. Even then, messages indicating disagreements were limited to between 4 and 8% of the overall messages. The two questions in which disagreement was expressed, were posed in such a way that they sought students' opinions on matters that they were likely to have an opinion on and which they could comment on in relation to their experience. The first questioned whether they believed diagnosis was important for the person with an ASD and the second discussion question asked students to comment on an article they had read and to contribute on whether they thought carers and practitioners in the field of ASDs need to have characteristics that make them 'qualitatively different'.

We found that the questions that gave students opportunity to share personal experience often created longer more monologue-like contributions punctuated with briefer (for the greater part) affirming responses. (see figures 2 and 3). Other questions showed a more even match (in length of post) between initial and responding messages and chains of interaction in which themes and responses were in turn responded to. These discussions had the character of lively and challenging debate. TimeToTalk 1 and 13 were particularly characterised by these types of postings. The questions posed for these discussions tended to give students an opportunity to reflect on practice more generally and less personally, giving them the opportunity to voice opinions. Questions that produced the lowest frequency of response were those that students found difficult perhaps because they felt ill prepared through lack of prior reading or had little experience in that area such as the question in Time to Talk 16 (see figure 3) Questions that asked students about their understanding of technical terms or required a detailed knowledge of reports or codes of practice showed less engagement.

In terms of numbers of words per post across the three different groups, these ranged between from 191 to 302 in Group A, from 178 to 231 in Group B and from 115 to 213 in Group C. We see from this that the lowest posting group tended to have longer postings whilst the highest posting group tended to have shorter length postings.

The role of the tutor

In the programme described here we wanted, as far as possible, for the students to ‘forget’ the eyes of the tutor and have opportunity to develop discussion skills necessary to reflective practice. We wanted these to happen naturally between students without inhibition generated by active tutor participation hence the non- interventionist approach. This approach was predicated on the need for highly structured tasks so that students would know what was expected of them and on topics that would encourage participation because students were sufficiently prepared for them and because they related to their practice and level of expertise. Tutors were expected to monitor discussion to provide a check that students were interpreting the task correctly, engaging with it and contributing productively. Moreover, at the close of discussion, the tutor summary was expected to provide formative feedback – an opportunity for the tutor to review and comment on student contributions in constructive ways. The summary gives the students an overview of the discussion, enabling them to step back from their own intervention in it and reflect on what has emerged from it both in terms of content of the discussion and their own learning/skill development.

The first aspect of the tutor role was a welcoming and affirming one. Tutors were encouraged, in the first module, to support and reassure students by addressing them by name and giving them positive feedback thereby helping them to feel that their contribution was valued. There are many examples of encouragement and positive feedback during the discussions (see figure 5). In subsequent dialogues tutors do not generally intervene in the discussion after the initial posting of the discussion topic until summarising at the end. After the first three discussions, we found very few examples of the tutor intervening in this way. Tutors still showed evidence of affirming students but mainly through the summaries (see figure 6).

Edward	As a first 'run at it' this was a lively and committed discussion.
Claire	Welcome to a new term's T2T. Hi Katie, good to see your message! Welcome. Hope to see you soon at our first f2f. Cheers Claire
Edward	Thank you for your participation in the exchange of ideas, any courteous challenges made and the reflection on your own and others view points.

Figure 5. Giving formative feedback or reassure/empathise with students

Tutor Summary: Fiona	This discussion was emotional and generated very interesting ideas. I could feel the frustration you experienced while writing about lack of understanding and support in mainstream schools that sometimes made the school life of children with ASD miserable and confusing.
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Figure 6. Extract showing affirmation of students through tutor summary

We also see the tutors taking on the roles of instructing and modelling behaviour. The tutors’ main influence was through summary writing and they did not therefore directly influence the development or flow of the discussion. Tutors varied in how much they used the summary to comment on the ways in which the discussion itself developed. In early discussions tutors were more likely to name particular individuals as having raised themes, thus giving personal affirming feedback (see figure 8). In later discussions, tutors focused more on synthesis of content themes and on the discussion as a whole rather than on establishing relationships with students through individual validation. One tutor commented on how this was deliberate - consciously shifting the role of the summary away from giving reassurance and individual feedback toward modelling what they regard as a good summary (see figure 7).

Edward	The way that Time to Talk works is that each discussion has a set period, at the end of which one or other Tutor will summarise the arguments advanced and the points made. It is good practice to mention how contributors came into the discussion; but, of course, it is not the object of the exercise to repeat in full exactly what anyone said. The summaries in this first term will largely seek to be factual and the Tutor will refrain from comment. At the end of each, however, there may be an idea from your Tutors that may spark a thought or two; to be stored in the back of the mind and to be brought out again as the Course progresses. Times to Talk are, in that sense, cumulative and build on one another.
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Figure 7. Explaining the role of tutor as T2Ts progress

A fourth aspect of the tutor role was intervening in discussions when needed. This did not happen often but tutors did intervene in certain instances. One was when the tutor had to answer a direct question from a student. Another was when the tutor felt the need to remind students that posting messages and participating in dialogue was a requirement of the course. The third instance was when the tutor needed to curb students' enthusiasm when they started a subject matter too early. One tutor also felt the need to remind students about how to compose messages in a way that would aid subject flow.

Tutors also showed evidence of challenging and giving feedback. This was often done in a subtle and supportive way, making students feel that their contributions had been noted and were valued (see figure 8).

Edward	<p>Yesterday I was attending a one-day Conference on autism; and therefore my apologies for the day's delay in posting this summary. Nevertheless, it was interesting, in coming to your TimeToTalk threads, to note the convergence of ideas between those and what was set out.</p> <p>in the Conference. One theme, strongly put across, coincided with Nina's that there is a common need for child-sensitive education, individually focused (Emma, Ursula, Diane) that goes way beyond ASD. Broadly speaking, if a method has advantages for a child with ASD, then it can illuminate aspects of education for all children. To be able to bring together these element 'effectively', there is a need to acquire a knowledge base about the said underlying philosophy and methodological 'strategy' of many (if not, indeed, all) of the offered systems (Claire). It is now time to pass on to the next topic area, which I hope will be as equally stimulating. After this evening this topic area will close.</p>
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Figure 8. Tutor modelling own expertise or skill as a practitioner, teacher, or critical discussant

Discussion and findings

Our Case Study research has taken note of McConnells (1994) call to conduct more research in real settings where participants use the medium for important, meaningful and purposeful reasons. From analysis of a real-life learning situation our challenge has been to find out what tutors do and why (Oliver, 2006) and to look at the impact of the management and selection of tasks, discussion groups and topics together with tutor interventions on subsequent discussion outcomes.

Decisions about the type of questions to ask students and how to encourage cognitive, reflective or interactive skills through the use of questioning, need to be made in the context of specific learning environments and should be set with the particular student group in mind. The pedagogical advantages of online collaborative learning are well known and we concur with Macdonald's research, which highlights that integration of collaborative learning and hence also dialogue within the course will radically influence its uptake (Macdonald, 2003). In this course, discussion questions are carefully integrated with online presentations, and reading material. This is likely to affect adherence to topic as discussion takes place with a structured environment.

An important role of the teacher is to set tasks and questions that will generate discussion in line with the aims of the course. In this course, the questions were aligned with the learning outcomes of the programme, as the focus was on developing reflective, team- working and problem-solving skills in the students whose background necessitates an empathetic and reflective stance. Course tutors recognised that the students on this programme usually arrived with a strong need to talk about their experiences and that the opportunity to talk about experiences was likely to lead to the development of confidence and motivation. The pedagogical considerations of the course had applied the concept of 'scaffolding' (Bruner, 1983) to the nature of the questions set. The aim was to 'scaffold' the students through their assessed work (and this was mirrored in Time to Talk questions) from being given opportunities to comment on their experience, through to being able to argue something from one point of view to finally commenting in a more balanced way looking at a variety of points of view. We see through the data that the students are comfortable with the first two stages but are still reticent to reach that third stage of criticality. This is an issue that the course designers can address in that there may need to be more careful thought attached to moving students from the notion of commenting on experience to arguing something from a more balanced point of view, in order to express criticality and disagreement.

Our findings highlight the need for course tutors generally to think carefully about the pedagogical considerations of their courses and to consider the types of questions that need to be posed in terms of meeting the relevant learning outcomes. Our research highlights the importance of creating a safe environment for students. One way to do this can be to focus on the types of questions asked at different stages of a course. It may be valid for other course designers, in line with Salmon's five stage model (Salmon, 2000), to aim to ask questions which encourage engagements on a social, personal and reflective level at early stages but then gradually introduce more cognitive demand as students progress through the course. This is particularly true for undergraduate students who have little experience of studying in Higher Education and might need to develop confidence and practice online interaction before being expected to engage in more cognitively demanding tasks.

Previous research has found that complex interactions tended to happen when the question was specific or it was a concept covered in a course reader and that discussions would fail if questions were too broad and open (Fung, 2004). We found that the issue was not so much whether the question was broad or focused but was related to the way in which students were asked to comment on experience. If questions were directly related to personal experience, then they tended to result in longer more monologue type contributions that tended to close discussion down. When reflecting on practice more generally and less personally, then we found shorter contributions, which had more interactive nature and the character of lively debate. This was particularly true if the question encouraged students to reflect on a particular concrete case or personal experience but then asked them to express an opinion on a specific issue for example if diagnosis was helpful or if a particular form of teaching was beneficial. Questions that were more open in asking students simply to raise issues in general that emerged for them may be less successful in generating debate.

Our interaction analysis found differentiation in the types of exchanges generated by different questions and this may be of interest to course designers in general. If we look at the relationship between structure and form, it has been argued (Kneser et al., 2002; Pilkington, 2003) that reinitiating forms tended to open up discussion for further elaboration and refinement whilst responses and their complements tend to be informative or provide feedback but close discussion down. Thus, the clarification and challenge occupying the re-initiating position within discussion can be an indicator of deeper engagement with each other's contributions. Less interactive discussions may be characterised by an initiating question (often posed by the tutor) with a series of informative replies by different respondents or the conversationally ill-formed initiate-initiate sequence where one person provides an informative comment followed by another unrelated informative comment (typical monologue).

This seems to be the case in this research and we feel it is important to look at context to understand why this may be so. The course is a continuous professional development course with a focus upon reflection and practice. This particular context, coupled with the needs of the student group, means that the course is focused upon developing reflective abilities and confidence about practice. It is in this context that we found that the online exchanges described here have tended more towards descriptions of personal experience than well-supported, subject-related reasoning (Angeli et al., 2003). This leads us to the conclusion that whilst it can be difficult to know how to evaluate the learning experience within Virtual Learning Environments, evaluating the extent to which interaction occurs or the syntax of interaction without also considering its semantic content, is not enough, particularly given that reflection is an important skill and process to develop (Gibson, 2006). We therefore need to develop other methods of analysis that allow us to measure not only the quality of interaction but the extent to which reflective abilities are developing.

The tutor clearly has an important role to play in enabling these reflective skills to develop. In this course, the role of the tutor has been shown in some ways to be similar to other e-moderator environments in that the tutor's role is to open the discussion, to help motivate learners, to encourage students to talk and share, and to highlight when it is time to move to the next discussion. Yet, the moderation role is also very different. This research shows that it is possible to enable discussion whilst giving the tutor a less interventionist role than we would normally expect the tutor to take on. Traditionally, the tutor's role is based on the premise that the tutor should take a leadership, which involves taking control over many aspects of the discussion. We would argue that it is possible for tutors to modify this role by taking a less interventionist role than is often expected. The supportive structure, coupled with the notion of the tutor as an 'enabling participant', can then lead to a focus on the student group itself and participants' belonging to that and it moves students away from the perspective of tutor as 'expert'. This seems particularly

important in a course that is about enabling people to become more reflective and is also about enabling students to rely on their own judgement in relation to practice.

Concluding comments

Our research found that the type of question posed to students has an impact on subsequent discussion patterns and leads to particular types of contributions from students. We found that some questions were better at enabling dialogue and reciprocity. These were questions that asked students to reflect on a specific personal experience and to express an opinion about an area of practice. Questions that gave students opportunity to comment on their own personal experience resulted in more monologue style exchanges. The research highlights that selection of questions for online discussions are important and need to be chosen in line with the learning outcomes and aims of a specific course.

We found that careful structure on behalf of the tutor in advance of a discussion can contribute to the development of discussion skills amongst students and that tutors can therefore be encouraged to take a less interventionist role has sometimes anticipated. We believe the key to success of this online course, is the integration of discussion tasks with good quality resources and regional tutors who give students plenty of time to talk amongst themselves, give supportive and reassuring comments, yet do not interrupt too often. Students talk in lots of different ways and for different reasons but we are learning that many of these are all important to a sense of community and, in the end, to helping each other learn.

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