

THE NATURE OF E-MODERATION IN ONLINE LEARNING ENVIRONMENTS

Panos Vlachopoulos, Napier University

ABSTRACT

Recent publications in the field of e-learning highlight the importance of the "moderator's" approach to developing students' online learning. They identify that the major challenges for online teachers arise from the diversity of roles which moderators are required to undertake. However, little is reported about the roles e-moderators actually adopt in different learning contexts, and how these range between 'teaching' and 'facilitating'. This paper focuses on the ways in which different e-moderators in higher education approach online learning with students. It reports the findings of a recently completed PhD study, which set out to observe, describe and analyse the distinct interactions between learners and e-moderators in four case studies taken from two research settings. A grounded theory approach was used to analyse and interpret the data. This generated a comparative insight into diverse moderation practices, and the consequent actions and reactions of e-moderators and students. In this study e-moderation was found to be directly influenced by the programme aims and the design of the students' tasks, which informed the purpose of moderator-student interaction. Furthermore the observed pre-established relationships between the various actors involved in the discussions directly influenced the style of moderator's intervention and the ways in which students responded. Herein, distinct differences in relation to the nature of e-moderation in online discussions were identified and discussed.

BACKGROUND

Teaching and learning in online or blended asynchronous learning networks (ALN) has been one of the main focuses of educational practice and research over the last fifteen years. The primary goal of research in the field of ALN was the process of learning and the pedagogy that supports effective learning (Benbucan-Fich, Hiltz, and Harasim, 2005). The process of learning and the pedagogy in an ALN have been examined by a number of researchers in the field of computer mediated communication (Harasim, 1990; Henri, 1992; Newman et al., 1995; Gunawardena et al., 1997) and online tutoring or latterly e-moderation in particular (Mason, 1991; Paulsen, 1992; Berge, 1995; Salmon, 2000; Garrison & Anderson, 2003). The work of these authors suggested that computer-mediated communication (CMC) may facilitate deep and meaningful learning and that the online learning experience may be enhanced by effective online tutoring by a moderator. It appeared that a key word to describe the role of the online teaching staff in CMC was that of the facilitator.

In CMC literature, the issue of online facilitation appeared from the early '90s, initially as an attempt to describe, as opposed to understand, the role that educators play online. At that time, Mason (1991) was among the first scholars who characterised the roles that teachers play online. She distinguished online tutor's roles in three major categories. These were the organisational role, the social role and the intellectual role. Within each of these roles, the tutor facilitates the learning of the students. Within the organisational role, the duty of an online tutor is to set the agenda for the conference. This involves presenting

the objectives (also referred to as outcomes) of the discussion, the timetable, the procedural rules and the decision-making norms. Then in the social role, the tutor is responsible for the creation of a friendly, social environment for learning by sending welcoming messages at the beginning of the course and encouraging participation throughout. Providing much feedback on students' inputs and using a friendly, personal tone are considered equally important. However, the most important role of the online tutor, according to Mason (1991), is that of the educational facilitator. As in any kind of teaching, Mason argues that the moderator should focus discussions on crucial points, ask questions and probe responses to encourage students to expand and build on comments.

Moderators, according to Paulsen (1992), perceive their role in educational computer conferencing in the light of their basic theories and philosophies toward education (e.g. adult education theories and social learning theories). Paulsen (1992) recommended that online tutors should identify their preferred pedagogical styles based on their educational orientation. This orientation then influences their chosen pedagogical style. The adopted style then leads to a chosen moderator role and subsequently their preferred facilitation techniques.

Berge (1995) added a fourth and transient dimension to the roles of the e-moderators, namely the 'technical' role. The facilitator (or e-moderator), according to Berge, must make participants comfortable with the system and the software which the conference is using. The ultimate technical goal for the moderator is to make the technology transparent. When this is done, Berge suggests that the learner (and moderator) may then concentrate without technological constraint on the academic task at hand.

The value of the above initial attempts to describe the roles that tutors play online has been widely recognised. Many researchers embarked upon the aforementioned characterisations of online tutoring, which are further elaborated in various studies as aspects of online tutoring are mapped alongside educational theories (e.g. socio-constructivism) leading to the proliferation of conceptual frameworks and models for online tutoring (e.g. Anderson, et al., 2001; Salmon, 2000) as well as a series of guide books aimed to assist tutors with their online teaching (e.g. Bender, 2003; Collison, et al., 2000; Ko & Rossen, 2004; MacDonald, 2006; Salmon, 2002). The essence of online facilitation and moderation in the aforementioned pieces of literature was not so much the effective use of the technology (although technical moderation is not underestimated), but rather the ways in which tutors may intervene online with a purpose. The purpose for online facilitation, nevertheless, may vary, depending on the particular context in which the online teaching and learning takes place. The literature has suggested a number of different contexts which may influence the purpose of the online facilitation. These include fully online distance and blended learning modules.

So the often asked question that concerns the role of the tutor in either fully online or blended learning modules is whether traditional tutoring principles can be adapted to meet the needs for online tutoring. However, there is no consistency in the published answers. Garrison and Anderson (2003) argued that 'it makes little sense to replicate or simulate traditional face-to-face approaches to online learning' (2). Yet Siemens and Yurkiw (2003) maintained that the 'skills and knowledge for tutors online are similar to those needed in a classroom

(132). The difference lies, of course, in how these skills are practised online and if and how 'teaching' and 'facilitating' online differ. In fact this latter statement was recently re-affirmed by Salmon (2007:172) who suggested that 'there is no evidence so far that there is an easy pathway between instructivist and constructivist approaches to online moderation'.

In addition to the above theoretical review, and taking a more practical standpoint, it can be said that:

A. Unfortunately, to date, the various papers, and the suggested frameworks and guide books for online tutoring offer limited practical understanding as to the ways and the practical complexities within which different members of staff adopt or are required to adopt one role or another in asynchronous learning environments.

B. There has been a rather limited interest in naturalistic studies wherein e-moderated discussions are part of an on-going course or module for students in higher education (Vlachopoulos & McAleese, 2004). Moderation has been mainly studied as an activity on its own, in settings which included either mature or motivated students. However, the generalities emerging from there, and which are aired about e-moderation in general, need to be qualified in terms of course aims and the learning outcomes towards which that moderation sets out to facilitate progress

C. The term 'e-moderation' can be and has been used in different ways, meanings and contexts, although these all involve someone (usually a teaching person) interacting online with students. How this over-generalised concept of e-moderation fits within the higher education practice of teaching, tutoring or facilitating is still an issue to be scrutinised.

These are the challenges with which this paper aims to engage the reader and providing them, where possible, with a deeper insight or at least some thought provoking questions in relation to e-moderation. It aims to do this by presenting some of the findings that emerged from the analysis of four case studies (Yin, 1994), that formed part of a recently completed PhD. Each case study concentrated on the successes and failures for each one of the four e-moderators involved.

THE STUDY

The PhD study reported here (Vlachopoulos, 2008), observed, described and analysed the distinct interactions between e-moderators and learners in real life research contexts in two higher education institutions in the UK.

In the first setting, in an English university, one tutor and 17 students from different countries participated over a period of one academic semester in a blended Master's course in 'Communications, Education and Technology'. This was delivered using a mixed-mode (or blended) approach of face-to-face tutorials and sessions in a Virtual Learning Environment (VLE). The students worked online with their tutor, at times a guest expert and a second tutor, all of whom adopted the role of "e-moderator". The students and e-moderators used a threaded discussion model, wherein all users had the option of responding to one another directly.

Research setting one provided the opportunity to explore three distinct cases of 'e-moderation' practice, involving respectively a novice e-moderator, who was

also the tutor of the module; and two e-moderators (invited, guest moderators) working together on the same task; and to compare the reactions of the same group of students to the aforementioned e-moderation approaches.

The second setting was an undergraduate course within a Scottish university. One lecturer and 25 students participated over a period of one academic teaching term in a blended course, delivered using a combination of traditional face-to-face teaching and an asynchronous virtual learning environment (VLE). This choice involved an interesting naturalistic (real world) setting, featuring an experienced lecturer who had decided to become an e-moderator. Students and lecturer met every week face-to-face for two-hour "lecture" sessions. Two further hours were engaged in an online student-centred-learning (PBL) tutorial, where students and the lecturer (now as an e-moderator) tackled previously declared case studies according to clear instructions and deadlines.

Research setting two gave the opportunity to explore the online moderation of group discussions by an e-moderator who was also the face-to-face lecturer of the same students; and hence to relate e-moderation and its impact on students' interactions to the achievement of PBL goals.

METHODS

Vlachopoulos (2008) assembled his data from:

- a. A pre-course student questionnaire which collected demographic information and information about the students' attitudes towards on-line learning, and their experiences of using computers and online discussions
- b. Three sets of interviews with the e-moderators;
- c. Focus group interviews with students at the end of the moderation period, to discuss the usefulness of the moderation;
- d. The transcripts from the online discussion board;
- e. A series of verbal protocols recorded by the e-moderators using the 'think aloud' approach (Ericsson & Simon, 1984), to provide information about the e-moderators' activity and plans.

His study concentrated from the outset on interactions, responses, reasons for postings, and influences on student learning and development, where these could be identified. He analysed the data, using grounded theory procedures described in Strauss and Glaser (1967), comprising open, theoretical and selective coding. The process started with an open coding, using NVivo 2. The data were split into discrete parts using the 'meaningful unit' approach (Chi, 1997). During the coding process, theory memos were written to record the development of concepts and categories. Those memos included information obtained from the verbal protocols and the interviews, which contained elements of the e-moderators' feelings and intentions. The coding process ended when all segments of the transcript had been allocated a code. Consequently the themes and theoretical hypothesis only emerged after his analyses of coded interactions within the discussion boards.

There were two coded schemas developed as part of the analysis process. One coding schema conceptualised e-moderation practice as either 'process' or 'content' focused for both the e-moderators and the students. The e-moderation of the process referred to the e-moderator's interventions in the process of

contributing to the direction of an online discussion, whereas the e-moderation of the content referred to e-moderator's interventions in the content of the discussed topic during the online sessions. The students' codes 'process' referred here to the different postings which the students made with the help of a moderator to take forward the online discussion towards the completion of a suggested task, for example by providing feedback to each other about how to discuss an issue or instructions on how to make a decision online. In contrast 'content' refers to the development and assembly of ideas, topics, questions which the students discussed. All the categories, which offer a first description of the e-moderation activity, were then triangulated with data emerged from another (second) level of coding, which was developed by tracing back what was reported in the other forms of data, such as the interviews and the recorded data.

All messages were re-coded in respect of the purpose of interactivity, using a classification system which emerged from the voices of the participants themselves (when justifying the reasons for responding or not to other's messages); and from the established literature in the field of online interactivity (Henri, 1992; Rourke, *et al.*, 1999). In short, this second classification system comprised the following categories:

- **Group Proactive** (Student or tutor looks for a response from someone in the group – anyone)
- **Group Reactive** (Student or tutor responds to one of the above, or some other message, playing reply back to group)
- **Individual Proactive** (Student or tutor looks for a response from a specific contributor, and even asks for it)
- **Individual Reactive** (Student or tutor responds to one of the above, or some other message, from and then to a specific contributor)
- **Quasi-Interactive** (just threaded (follow-up) message where tutor or student acknowledges previous message but continues with a new idea/concept)
- **Monologue** (A new thread. No evidence of interaction with any other participant)

This coding process allowed a more complete story of e-moderation to be heard, through a clear picture of how moderators and students had behaved in particular situations.

FINDINGS AND DISCUSSION

From the beginning of this investigation into e-moderation practice, the role of the moderator and the consequent nature of the moderator's interventions in the online discussions were identified as key issues. This was true for the literature survey, and in the findings which emerged from the tutors' and the students' data in this study.

This research found that the moderators in all four case studies declared an intention to adopt a learner-centred style of e-moderation. All four moderators mentioned that they would prefer to adopt a facilitator's role, with the students being in the core of the online discussions. They declared so during their first interviews.

More specifically, in case study one the moderator wanted her learners to go about the process of learning autonomously, and to reach conclusions autonomously (and with little influence from a teaching person). In case study two, the moderator, who did not in any case have tutorial responsibilities, aimed to promote thinking and independent learning by making thought-provoking comments and asking worthwhile questions. In case study three, the moderator aimed to follow a more directive approach by modelling ways of dealing with the task given to the students, hoping that in this way the students would develop the skills to complete the task effectively, and to an acceptable standard. Finally, in case study four, the moderator claimed to have opted for a Problem-Based Learning (PBL) approach to promote deeper thinking regarding difficult engineering issues.

The moderators in this study had emphasised that they would base their e-moderation interventions on their own teaching philosophies, on their expectations of the students, as well as on the prescribed roles described in the activity descriptions for each case study. Further, they all recognised the importance of training, experience or briefing in helping them prepare for e-moderation. As such, this sounds like nothing new; but the ways in which these intentions and plans were actually executed in the online discussions prompts a searching for a re-consideration of the way in which tutors may adopt an intended moderator's role, once they go online.

In the related literature, the tutor or e-moderator was generally seen as a facilitator, whose role was to assist the students to become independent learners - usually through a scaffolding process (Garrison & Anderson, 2003; Mason, 1991; Palloff & Pratt, 2005; Pata, *et al.*, 2005; Salmon, 2000). It was strongly suggested, therefore, that in online learning the teacher should no longer be in full control, and that learners should actively take responsibility and should start to coordinate and regulate their own learning (De Laat, *et al.*, 2007). The literature survey had also indicated that, in online asynchronous learning, the tutors need to develop a particular set of skills and competencies to "teach" effectively online, and should do so develop through participation in training sessions for e-moderators (Goodyear, 2001; Salmon, 2000). The most well-referenced competencies for an e-moderator include the ability to engage and motivate students in an open and friendly manner (Goodyear, 2001; Salmon, 2000); to appear to care about the students online (Bender, 2003; Garrison & Anderson, 2003); and to be able to provide prompt feedback, but also to challenge the students with questions (Anderson, *et al.*, 2001). Many of these competencies for online tutors, of course, are not specific only to online tutoring but apply to tutoring in general (Laurillard, 2002).

In practice, the moderators' intentions in the present studies did not match either the ideal moderator's profile which the related literature illustrated and which, in varying ways, the moderators who were studied had hoped to embody - or even their declared intentions. None of these moderators succeeded in effectively engaging the students online, nor in promoting the desired student-centred learning.

All the above advice offered in the literature was affirmed to some extent (and often in the breach) by the findings in this study. It is worth pointing out that a

substantial part of the literature in e-moderation and online tutoring was written by persons who have been researching their own innovative educational practice, reporting and often only describing findings which were not derived directly from existing naturalistic contexts, and which included no data about the outcomes of that practice in terms of student learning. There seem to have been no studies to date which have reported analysis of findings regarding the learning and development consequent on moderation by tutors working on credit-bearing modules. Such tutors will have had to accommodate added pressures to meet the needs of the curriculum and those of their learners. They are also usually required to adopt multiple roles within their institutions (for example, the role of the programme leader, the facilitator and the assessor).

With the above in mind, the present findings raise some important issues about the nature of e-moderators' interventions and the ways in which tutors adopt and adapt their roles in ongoing modules in HE. One factor here is the set of eschewed principles upon which the moderators decided their intended overall e-moderation approach, coupled with the changes made to that, in practice. The other is the impact of the observed e-moderation approach on the students' engagement in the online discussions, and on their consequent learning.

In relation to the first issue, there is some evidence from all four case studies to suggest that the decisions upon which the moderators each based their moderation approach were primarily influenced by their understanding (or not) of the key principles and potential of student autonomy in online learning. The observed mismatches between the 'ideal' and the reality were perhaps the result of different views on the part of those concerned regarding what form 'moderation' should take, and of what an online discussion should entail in terms of student and tutor effort, interactions and learning outcomes. Similar dilemmas were also reported in the literature by tutors new to e-moderation (Bennett & Marsh, 2002; Bennett & Lockyer, 2004). The moderators in the present study expected that the students should contribute pro-actively to the discussions in their groups, and put in the necessary effort to deal with both the process and the content of the tasks. In contrast, the students expected, or at least desired, that the e-moderators should be active in leading the way. Consequently part of the tutors' consequent activity comprised efforts, overt or covert, to rectify this lack of shared acceptance and understanding of purpose, roles and activity – and should probably have featured in the preparation for the activity. For the extent to which the principles of an e-moderation approach is based are made explicit, and understood, and are agreed beforehand by both moderators and students, seems certain to influence the way in which the moderation activity will and can develop.

As far as the issue of the impact of the general nature of the e-moderation on the students is concerned, it could be said that an important factor which influenced the range of interactions between the students and the tutor or the guest moderators in the case studies which were studied was that of online 'dynamics'.

For the students in the four studies, there were various pre-established power-relations with the tutor-moderator, the guest-moderator and those students who sometimes adopted a moderator's role. In all of these dynamic relationships, the students reacted in different ways. A tutor-moderator was the one who, in the

eyes of the students, would eventually, informally and formally, assess the content and process of the discussion, and who thus appeared to have the final say in a judgment of moderated activity. A guest or expert moderator was perceived and acknowledged for their expertise in the content or the process, but their views might need to be validated by the tutor-moderator. This was particularly evident in case studies two and three where, although the two moderators (as expert and guest moderators respectively) were active in content interventions, their guidance in the process was only accepted and followed after the tutor-moderator had intervened to approve their suggestions. Finally, a student-moderator (or quasi moderator) may be a colleague with no greater expertise than the other students, but with the willingness to lead or at least work harder towards the completion of the task. Having a student-moderator, however, may result in the tricky situation, where everybody else in the group will count on the student moderator to complete the task for the group.

It thus became apparent that when deciding the role(s) of the tutor or the teaching person in online discussions, great care should be taken in the way this role will be explained, genuinely understood and eventually agreed by the students. That is because on the one hand many students still lack the skills to 'resist' the tutors' directions; and on the other hand, in the absence of the tutor's presence, students may be suspicious of anyone else wishing to fulfil this role (Anderson, 2006). For example, in this study most of the students did not critically question or challenge any of the four moderators. Instead students appeared to be trying to follow their moderator's instructions in order to complete the tasks. Similarly, in case studies two and three, the students were very reluctant to follow the suggestions of the guest moderators, unless these were supported by the tutor-moderator.

Despite some early warnings in research related to computer-mediated communication (e.g. Jones, 1995) about the importance of considering issues such as the online dynamics, the literature offered very little information or advice on this topic. These findings made it clear, however, that online discussions are not a power-free zone (Anderson, 2006). Online interactions normally take place in contexts 'authorised' and 'defined' by the tutor spaces; and the way in which the tutor or any other teaching person is perceived by the students plays a significant role in the way students interact with them.

CONCLUSION

This paper summarises some evidence to suggest that there may be important differences to be aware of with regard to the general nature of the e-moderators' perceived - and understood and practiced - roles and their consequential impact on the students' motivation, level of participation and engagement with the discussions. The observed nature of the e-moderator's interventions has emerged as having a strong influence on how effectively the students engage with online discussions. The moderator may be committed to a student-centred approach and to allowing learners to take responsibility over their own learning. But this self-responsibility is still defined, monitored and even (clearly) judged by fellow tutors who are in a position to both allow and disallow students the exercise of such a responsibility.

Thus doubt may be cast on the over-generalised concepts of 'teaching presence' (Anderson, *et al.*, 2001), and on the definition of 'e-moderation' offered by

Salmon (2000). 'Teaching presence' asserts that learners and tutors may establish the teaching, learning and cognitive conditions for the learning development to occur in a collegial manner. However the findings of this thesis have shown that the presence of the tutor e-moderator, and their eschewed principles of teaching had a marked influence on the students' engagement in the discussions. Furthermore, the definition offered by Salmon (2000), which suggested that an e-moderator can be 'anyone' who presides over an e-meeting, certainly is not in accord with the evidence of this study. All the evidence from the students' interviews and their online postings suggested that there was a need and usefulness in having a pro-active, reflective moderator who had the skills to engage the students and to motivate them to participate in online discussions. And the reflective reviews by the e-moderators of the experiences certainly reaffirms their conviction that they were attempting to do more than preside, and felt that their intended role went far beyond presiding.

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