

Learner and teacher electronic relations: experiences of one distance learning health studies programme

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Abstract

The technological opportunities provided by digital learning environments for electronic communicative transactions between learners and teachers, now common in Higher Education in the United Kingdom (UK) challenge the traditional concept of a learner and teacher relationship. This paper considers electronic interaction between learners and module facilitators and draws on a small study that evaluated the experiences of twenty five post-qualifying health and social care practitioners studying on a BSc (Hons) Health Studies programme. A case study approach was used to explore how learners and module facilitators communicated and interacted using the electronic system as part of their support structure. The aim of the study was to explore in what ways interaction with teachers using electronic communication systems influence the learning confidence of learners studying at a distance.

A key finding of this study indicates that learners and teachers developed close, partnership style relations that confirm interpersonal and social presence in a non-contiguous, technologically mediated learning environment (Morgan 2002). The possibility of developing close relations is explored in this paper in the context of a distance learning programme, a range of contributing factors and outcomes are suggested that represent close learning relations and implications for education practice and future research are discussed.

Key Words

Electronic interaction, e learning, close electronic learning relations, learner support.

Introduction and background

Calls for the development of a culture of life-long learning in the National Health Service and pledges to use technology to increase flexibility of access to professional learning are set to make on-line and distance learning the dominant means by which learning is organised for post-qualifying health and social care professionals in the future (DoH 1998; DoH 2001; Robinson and Shakespeare 1995).

Managing electronic information that is not structured in a simple, linear and logical order but that is fragmented, multi-channelled and simultaneous in nature is likely to present qualified health and social care professionals with significant challenges in the future (Lewis 1999). Post-qualifying professional education recognises the need for today's health and social care professionals to acquire core skills and competencies in working in teams and communicating in a multi-professional context while operating more remotely.

Electronic communication and interaction are not, as yet, everyday activities for health and social care practitioners, either as part of their everyday practice or as part of earlier learning systems and so they have limited opportunity to build the necessary skills in using electronic systems. Lack of confidence in using technology, disbelief in the possibility of online relations or failure to manage electronic communicative interactions may reduce learners' opportunities of benefiting from e-learning (ENB 1992, 1995) (now the Nursing and Midwifery Council, NMC). How best to assist learners to increase their confidence to communicate and interact electronically to support their learning, during a period of study, was addressed when designing and developing the learner support system for the BSc (Hons) Health Studies programme.

This programme was designed as a part-time, distance learning programme to meet the needs of health and social care practitioners who hold an academic diploma qualification and want to gain a degree in a non specialised subject along side working full or part time. As Kemp (2002) points out, adult learners turn to distance education because it is anyplace and anytime, allowing them to juggle the demands of family and work.

Distance and e-learning offer advantages associated with greater flexibility and open access (Holmberg 1995), but necessitates learners to be skilled in planning and managing their own learning. According to Paul and Brindley (1996), isolation has been identified as an important aspect of e-learning and learners need to be able to seek help to resolve learning difficulties as and when they arise.

The literature

The nature of learning support based on electronic communication and interaction has been discussed widely in the literature. The idea that interaction and personal relations can be fostered between learners and teachers at a distance was first presented by Holmberg as early as 1996. Holmberg's (1996) concept of 'simulated didactic conversation' focuses on facilitating growth with learners seen as partners with knowledge, experience and capacity with which to contribute to the development of their learning through online conversations with teachers.

Communication and interaction, in the absence of face-to-face contact, has developed considerably over the last two decades during which time traditional pedagogical thought involving expository teaching and receptive learning has been increasingly challenged (Peters 2004). Today's use of adaptive media to provide feedback focused interaction between learners and teachers offers examples of positive learning experiences (Peters 2001; Laurillard 1993; Holmberg 1989). Recent designs of education software have been aimed at addressing what are now known as particular e-learning needs, such as increasing motivation (Soloway 1997).

The importance of human interaction as a critical success factor in e-learning has been increasingly emphasised in the literature over the last decade (Mason, 1991; Morgan and Smit, 2000; Naidu, 2003; McMann, 1994). Price (1997) emphasises the nature of support distance learners' need that centres on

feedback. Tait (2000) stresses the importance of 'affective' support and the need to provide an environment that creates commitment and enhances self-esteem. Thorpe (2001) highlights three important characteristics of electronic interactions that indicate significant shifts in learner and teacher relations. These are that they are 'identity focused', 'individualised' and 'interpersonal'. Some of the more recent terms used to describe various support roles for e-learning emphasise the importance of human interaction. For example, *moderator* (Salmon, 2000), *facilitator* (Collison et al. 2000), *coach* (Murphy et al., 1998), *leader* (Hotte and Pierre, 2002), *motivator*, *mentor*, *mediator* (English and Yazdani 1999). In recognition of the importance of learner and teacher interactions and support needs of learners in distance and e-learning, the Institute set up a distance learning unit to assist the planning and delivery of the programme in this study.



The BSc (Hons) Health Studies distance learning programme

The Distance Learning Unit consisted of a distance learning manager and an extensive administration service, including a telephone 'help desk' system that provided valuable 'back up' support for learners in addition to the module facilitator. At the time this study was carried out the programme was designed to be delivered using learning packages consisting of module guides, learning activities and key texts which were posted to each learner. The total communication systems available to learners and teachers included an electronic learning environment consisting of electronic mail and a shared discussion area, the telephone and General Post Office mail. Designing support using appropriate and timely communication and interaction with learners presented considerable challenges.

Module facilitators were concerned about how dependent style student behaviours, frequently experienced in traditional classroom teaching contexts, might be discouraged for e learning. All of the module facilitators had experienced difficulty with learners who leave their study to the last minute prior to submission of an assignment, make unrealistic requests for learning support and demonstrate poor skills in planning and managing learning.

With this in mind, the new learning support system was based on a concept of supported learning at a distance in nurse education (Lawton 1997) and drew on the concept of scaffolding (McKenzie 1999). Lawton (1997) argues that learners needs vary on the stage of the module/programme they have achieved and that the goal of an effective facilitator is to lead learners through three distinct phases starting with the 'meeting' phase, followed by the 'guiding' phase and ending with the 'moving on' phase. Reaching the moving on phase represented increased emphasis on assisting learners to be self-directed in their learning. A module timetable was designed as a central structure to guide both learners and teachers through each of the three phases and a 'schedule of communication' was used to indicate the nature of supportive actions to match each phase, as shown in Table 1 below.

Table 1. Module timetable integrating three phases of learning and a schedule for communication and interaction

| Learning Support Phase | Activity | Date/Week No |
|-------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| Meeting  | You will receive the module study materials on: | |
| | <ul style="list-style-type: none"> Read and check all details relating to your responsibilities and create your questions list before induction | |
| | The module starts week beginning: | |
| | Induction to the module will be held on: | |
| Guiding  | Your module facilitator will contact you by telephone/e-mail for tutorial No. 1 during week beginning: | |
| | <ul style="list-style-type: none"> Create your questions list eg, relating to the module assignment and first activities Prepare to share your personal time management schedule, consider what might be your greatest challenges for learning Arrange a date for second tutorial | |
| | First formative assessment to be completed by: | |
| | Written feedback on first assessment by: | |
| Moving On | On receiving written feedback you may need to contact your module facilitator for verbal discussion | |
| | <ul style="list-style-type: none"> Arrange a discussion time by e mail | |
| | Online synchronous group tutorial on: | |
| | Submission of draft assignment on: | |
| | Feedback on draft assignment on: | |
| | Online synchronous group tutorial on: | |
| | <ul style="list-style-type: none"> Create your questions list Evaluate your learning skills strengths and future needs | |

| | | |
|---|-------------------------------------------|--|
| ↓ | Submission of final module assessment by: | |
|---|-------------------------------------------|--|

The meeting phase emphasises the importance of helping learners to get started. Learners received all module information two weeks prior to the start with an option to attend an induction day. If attendance was not possible then synchronous electronic mail communication was scheduled on the same day. An important aspect of the guiding phase was the provision of feedback on draft assignment work with, in some cases where appropriate, the use of learning agreements whereby facilitator and learner agreed on a set of dates for learners to submit further work and for facilitators to provide further feedback. This form of service agreement helped both facilitator and learners to plan their commitments in advance.

The 'moving on' phase concentrated on providing guidance on assignment preparation, including academic writing and developing critical and reflective analysis. Learners were expected to communicate their needs based on the outcomes of earlier personal reviews. Each module differed in how long this support phase lasted depending on the extent of commitment by learner and module facilitator. The first module in the programme proved to be the most demanding for learners and subsequent modules were less so as they became more familiar with the support system and the responsibilities for learning they were expected to take.

Methodology

The study followed a naturalistic approach combining illuminative evaluation (Parlett and Hamilton 1972) and case study (Stake 1995). The reason for selecting this approach was based on the need to bring to the fore the expectations and perspectives held by the participants in this case. Parlett and Hamilton (1972) draw attention to two central concepts in the study of an innovative programme. These are, the 'instructional system' and the 'learning milieu', and in particular, the interaction between the two. This matched the focus of this study, which concentrated on the influence of the communication and interaction process on student's confidence to learn.

All learners who had enrolled on the programme as well as the four teachers who led the programme modules were included in the study. This aimed to ensure inclusion of all individuals with special insight and who were able to represent important theoretical constructs concerning this particular case. In order to gain multiple perspectives and to facilitate triangulation, a combination of methods of data collection were used. These included; semi-structured interviews, student reflective accounts, documentary analysis and questionnaires. The collection of data followed a progressive focusing approach (Parlett and Hamilton 1972). Documentary analysis illuminated how the communication and interaction process had been visualised and planned and provided insight into the perspectives, assumptions, concerns and activities of those involved (Taylor and Bogden 1984). Such documents included notes of the programme management team meetings, general memos, validation documents, the programme handbook, module study guides and module evaluation forms.

Additional data was gained from reflective accounts completed by students at the end of the programme. The aim of the account was to encourage students to reflect on their own actions and those of their teachers. The reflective account was structured in such a way as to help them to focus on three particular areas. These were: the reasons for communication and interaction, the nature of the dialogue and the outcomes following the communication and interaction. A completed account was returned by each student.

Ethical considerations

Ethical approval was obtained from the University's Research Committee in accordance with the University's procedures. Following approval, a letter was sent to all of the eighteen students registered on the programme and included in the study, explaining the study and asking for consent to be interviewed and by doing so they consented. Anonymity and confidentiality were ensured and participants were ensured they could withdraw from the study at any time. The same process was followed for each of the four module leaders included in the study. No names were included in reports and all participants received a copy of the report produced from the study.

Data analysis

The analysis involved the development of broad analytical themes based on in depth reading of the transcripts. A process of open coding was used to identify issues and concerns that were important to respondents regarding communication and interaction. The result was a range of thematic perspectives that reflected student experiences that could be taken forward. One of the major themes emerging from the data was that of 'close relationships'. Additional data was gained from the reflective accounts completed by students which were structured in such a way as to help them focus on three areas. These were reasons for communication and interaction, the nature of dialogue and outcomes following at the end of the dialogue. Every student sent in their accounts at the end of the programme for analysis. The module evaluation forms also contributed to the data recorded. Further analysis confirmed themes and relationships between different categories.

Findings

The findings indicate that each learner and facilitator relation was unique and relations between four different module facilitators and twenty five learners involved different levels of interaction. Overall, learners considered their relationship with module facilitators to be closer than they had previously experienced in traditional classroom learning contexts. 'Closeness' was viewed as a positive and important element of support for learning and frequently referred to as 'we got to know each other well'. 'Closeness' was interpreted by learners as a feeling that the module facilitator was travelling with them on a learning journey, in touch with where they were and who they were as learners to the extent that a sense of constant presence was achieved.

From more detailed analysis of the data, gained mostly from learners' reflective accounts, it was possible to identify a number of contributory factors to close relations. A constancy of interaction was sustained over the period of a module; structures to guide both learners and teachers with interaction, a balanced control over learning through the use of negotiation and engagement in planning and managing own learning by learners. Close learner and teacher relations are considered to be derived from a number of key contributing factors as set out in Table 2 below.

Table 2. Contributing factors to close electronic learning relationships

| Electronic Learning relationships |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • Constancy of interaction • Structures to guide interaction • Balanced control of learning through negotiation • Engagement in planning and managing own learning by learners |

Constancy of Interaction

Data indicate that facilitators as well as learners initiated communication over the period of a module in order to sustain interaction which represents a continuous concern and commitment to learners' support. As one learner explained, 'when I get an e mail from the teacher it makes me feel so much clearer and a lot more motivated'. Learners gained a sense of the module facilitators' presence when both contributed towards maintaining interaction that contributed towards visibility in this virtual environment. Interaction was focused towards assisting learners to learn how to learn. As learners continued towards the final stage of the module, they planned to use interaction in a more structured way.

When asked to explain the nature of interaction, learners referred to the way facilitators had helped them to think about their learning plans, triggered ideas to go further in their reading and consider issues they had not thought of. As one learner explained, 'I now notify the teacher in advance, send through draft work and receive feedback when I need it'. Another learner wrote in her reflective account 'the discussions in e mails left me feeling focused and clear about the actions I needed to take'. Another learner wrote 'I received responses from my teacher and guidance towards other ideas which encouraged me to read further'. Increased self-reliance is evident in the learners' reflective writing when they experienced success resulting from actions they took.

Support for affective aspects of learning was evident in that facilitators conveyed a personal style with warmth, encouragement and enthusiasm, humour and sentiment that illustrated an understanding of the learner as an individual related to the stage of learning they had reached in the module. Constancy of interaction is described by Keegan (1996) as continuity of concern for students. A sense of continuous concern, focused on what learners need to do to learn, was viewed by learners as a closer level of interest in them as individual learners. Electronic mails, received through a personal message system, increased the personalisation and focus of interaction and stimulated a train of communicative messages that represents a conversation. Gunawardena et al. (1997) define interaction as a totality of interconnected and mutually-responsive messages. Making and sustaining interaction over the period of a module, as a two-way process involving reciprocity, was evident in the reflective accounts written by learners.

Structures to guide interaction

The module timetable was viewed as an essential structure for helping learners to understand what was expected of them at different phases of a module. As one learner suggested 'I was pleased to say to the teacher that I would call again when I had finished doing the next stage and I knew when we would be talking again'. A picture emerged whereby learners considered continuity and making mutually beneficial agreements to have brought about close relations.

There might have been an expectation that electronic interaction would flow automatically, but this was not the case. When silences occurred for any length of time, learners described feeling isolated. As one learner explained, 'It is difficult to send a message to my teacher when I haven't spoken to her for a while'. The use of an integrated model of learner support communicated through the module timetable, created a new understanding of the possibilities for electronic communicative transactions for both learners and facilitators. The timetable acted as an important trigger for communication and helped learners and facilitators travel together.

Interaction and communication needs changed depending on the stage of a learners' journey and different learners progressed at different rates. Learners suggested interaction was focused on their individual learning needs according to the stage of the module they had reached. For example, one learner explained that at the beginning 'I needed to check out if my interpretations were OK' and another 'I need to know if I have interpreted what I am reading properly'. At later stages of the module needs were commonly expressed as 'I need to know if I haven't gone completely off at a tangent' and 'the e mails focused on me voicing my ideas and bouncing them off my tutor, guiding me through ideas'. Table 3 below lists the needs of learners at different stages of the module as recognised by respondents.

Table 3. Learning support needs at different stages of a module

| Stage of learning | Aspects of learners' needs | Response |
|-----------------------------|--------------------------------------------------|----------|
| Meeting and getting started | Whether 'doing the right thing' | 82% |
| | How to plan module study alongside other demands | 41% |
| | How to prioritise reading | 48% |
| Guiding | How to manage conflicting demands | 52% |
| | How to negotiate time to study | 62% |
| | When to ask for help | 64% |
| | Whether going off track | 42% |

| | | |
|-----------|------------------------------------------|-----|
| Moving On | Feedback on work completed | 92% |
| | Information on strengths | 46% |
| | To trigger new ideas | 39% |
| | Explore more varied areas of the subject | 34% |

Balanced control of learning through negotiation

Negotiation became an increasingly integral part of interaction as learners progressed in the programme. Learners were encouraged to negotiate dates for completing stages of learning, draft work and module assignment submission dates (within accepted regulations), setting and re-setting priorities, goals and targets. Learners said they were able to plan and manage their learning with more control, because of the opportunity to negotiate and in this way responded to the triggers and encouragement received from facilitators. For example, one learner wrote in her reflective account 'It's a lot less formal, everything felt more on my terms, that I had more control over my learning'.

As Oliver and McLoughlin (2001) suggest, flexible systems can encourage more responsive conditions for learning and are vital if the process is not to be reduced to a transmission approach and a relationship in which the teacher defines the needs of the learner. Teeter (1997) also highlights challenges of teaching and on the internet that emphasise interactions that are reciprocal in nature. However, Tait (1999) suggests a less positive view of flexible systems when he points out the possibility for them to shift the burden of responsibility on to the learner. Indeed, taking control over learning was viewed as a demand for learners that for some caused anxiety. Increased demands for learning were frequently expressed as a 'need to be more disciplined'. All learners indicated an increased self-awareness as a result of taking part in interactions focused on their learning needs, goals, conditions and skills.

Engagement in planning and managing own learning by learners

Module facilitators encouraged learners to think about their personal preferences, learning styles and personal characteristics when encouraging learners to take greater responsibility for planning learning. A realignment of expectations on the learners' part was often required and module facilitators helped learners to consider their role as learners. The process of assuming more responsibility for learning, particularly planning and organising learning, required motivational prompting and guidance. Some learners had little insight into their own learning needs and style. If this was the case they were directed towards study skills diagnostic materials as well as study skills development resources.

Learners identified the importance of interaction with facilitators as one of validating worthiness and encouraging them to recognise for themselves their planning skills and learning strengths. As one learner explained, 'I've found that it really helps to plan out my work properly'. Evidence of a greater understanding of learning weaknesses is evident as in the next phrase taken from one learners' reflective account, 'I've changed the way I work I write it down straight away before I was waiting to start too late'. The role of the facilitator in assisting learners to increase engagement in planning and managing their own learning was closer in characteristics to that of a counselling role and contributed to increasing learners' self-reliance in selecting ways of working that met their individual needs. This is supported by the findings of Zimmerman (2000) who evaluated the extent to which guidance supports self-regulated learning.

Drawing on the findings of this small case study, a number of key characteristics associated with closeness in electronic relations between learners and module teachers have been drawn together to illustrate their contribution towards learners' increased self-awareness of their own learning needs and increased self-reliance in learning, as set out in Table 4 below.

Table 4. Key characteristics associated with close learner and teacher relations

| Key Contributors to close electronic relations | | Outcomes associated with close electronic relations |
|---------------------------------------------------------------------------------------------------|---|--------------------------------------------------------------------------------------------------------------------|
| Clear communication of learner and facilitator responsibilities | | Increased self-awareness Understands and communicates own needs Values own ideas and contributions |
| Structures indicate purpose and timing of communication | | |
| Opportunities and facilities for learners to consider own learning needs and plan own development | → | Able to negotiate Understands how to use resources Increased self-reliance Own networks of support |
| Opportunities for learners to practice negotiation | | |
| Interactions focused towards shared responsibilities | | Selects ways of working to meet own needs Sets own priorities, goals and targets |
| Opportunities to engage with peers and other forms of support | → | |
| Opportunities to organise learning to match own needs, interests and practice context | | |

This paper argues that close electronic learning relations don't happen naturally but they need to be planned using both academic and technical structures that are aimed at promoting human interactions. Once established, learning relations need to be carefully managed and module facilitators need to be skilled in interacting with learners using democratic and partnership styles of communication. Learners need assistance to plan and manage their own learning and encouragement to take an active role in a partnership style relationship.

The following lists a number of key implications for future practice:

- A shift of emphasis away from what students learn to who they learn with. Health and Social Care education has historically valued mentorship practice in education, particularly in research practice

- which provides a strong evidence base upon which future e learning relationships can be developed.
- Learners' awareness of their learning needs is an important pre-requisite for taking greater control of learning and an outcome of engaging in close electronic learning relations.
- Different stages of learning influence learners' support needs and changes the focus of electronic interactions

Conclusions

This paper set out to provide an examination of electronic interactions between learners and facilitators, based on one small case study of practice that found that close partnership style relations developed between learners and teachers when interacting online at a distance. Consequently, this paper offers a range of contributory factors to establishing relations that represent a concept identified as close electronic learning relations that are linked to increased learner self-awareness and self-reliance.

Interaction is at the heart of health and social care practice as well as at the centre of the learning process. This is a small study of just one distance learning context and further research would be valuable to consider learning relations involved in a broader range of electronic communication contexts. If module facilitators are to make best use of such web based template systems as Blackboard and Web CT in the future, it is an educational imperative that research continues to explore the outcomes of electronic interactions and learner and teacher relationships in order to identify more clearly how they influence learning in a multi-professional context.

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