

E-Reflections: A Comparative Exploration of the Role of e-learning in Training Higher Education Lecturers

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INTRODUCTON

This paper forms part of a wider research project into the potential role of e-learning in the transformation of learning and teaching in Higher Education (HE). In particular, it examines the extent to which engagement in e-learning by teachers in the sector can influence practice – whatever their mode of teaching delivery.

This paper provides an initial evaluation of data gathered by running a version of a five-week online programme called 'e-Reflections' specifically for academics from or working in the Gulf and the wider Middle East Region starting in May 2005. The participants were primarily from a number of institutions in United Arab Emirates (UAE) who were joined by colleagues in Egypt and Turkey. Of the 14 participants working in the region approximately half were from the region (three of whom are currently studying at Leicester). The remainder originated from United Kingdom, a small number of other European countries and the United States. Potential participants were informed that 'e-Reflections' was based on Salmon's model of networked learning (2000, 2002b) and given access to information about the course online^[1]. They were informed that in addition to covering the basics of e-tutoring, the course would also introduce the creation of online activities (or e-tivities) for online discussions. Up to 20 places were offered free of charge (rather than the usual charge of GB£225) on the basis that the analysis of the contributions (all suitably anonymized) would form the basis of this article.

One of the catalysts for this paper, and the wider project, was the authors' own engagement with the use of asynchronous online communications (sometimes called, fora or discussion boards). The richness of the data shared through them had an immediate attraction as a possible research media. 'E-Reflections' was developed at University of Leicester as a framework to engage staff in such communications. It emerged from experiments in 2002 in adapting tasks that had previously been used in staff development to an e-learning environment. One of the earliest (and most revealing) became known as 'Virtual Lego'^[2]. A subsequent exercise adapted a management training exercise developed by NASA and much-used in the United Kingdom (UK)-'Stranded in the desert'. These explored in a practical and experiential way the potential of synchronous and asynchronous communications for teaching at University of Leicester. The debrief from these exercises clearly established that even the early adopters-the most experienced e-learning tutors within the institution-lacked a clear structure to support their students online. They provided a salutary reminder for such staff of the experience of e-learning from the student's perspective. Consequently, 'e-Reflections' drew extensively on Salmon's five-stage model of networked learning to provide such a structure (2000, 2002a).

BACKGROUND LITERATURE

We drew from the overall concept of knowledge construction. Claims in some literature of the ubiquity of the deployment of knowledge construction concepts may be regarded as reasonable given not only the copious texts published on the concept but also its wide scope. Whilst the basic

concept may be simple, there are many varied forms of constructivism. As Phillips notes the various forms of constructivism are, "... not 'single issue' positions ... (since they address) a number of deep problems" (1995, P7). Light and Cox (2001, 59) suggest, however, that the nature of the learning experience (in terms of quality, quantity and transformation) are less important than, "... the role they play in the transformation of the person towards a critically self-directed and emancipated self ...".

Reflection by teachers on their own practice has increasingly been seen as an essential part of professional academic practice enabling such transformation. Some writers have drawn the analogy with a mirror (Brown and McCartney, 1998; Salmon, 2002b). This suggests that the practice of reflection enables participants to view a truthful image of their professional selves. The mirror analogy does not, however, fully take into account the potential developmental nature of reflection. Biggs (2003), for example, suggests that it is more like a magical mirror or pool of water featured in many mythologies that tell the observer something about themselves other than merely a faithful reflection. In the context of this paper, the question is whether collective reflection through e-learning reveals more about the potential of the individual through the consideration of their current reality.

Asynchronicity also has a significant impact on the nature of student-to-student contact. A range of published research emphasises the importance of the informal exchanges between students. The distinction between formal and informal education collapses if online discussions play a significant part of a course. The teacher is able to observe and influence the less formal exchanges. Perhaps even more important is the fact that they are open to the whole class making the informal curriculum more accessible. The fundamental difference is that, "They can structure their thoughts and make them publicly available ... in a way that is rarely possible in other media" (Salmon 2002b). Such visibility and space mean that participants, "...are often more willing to try things out in a dynamic way than they would be face-to-face" (Utley, 2000). The ability to pool their experiences as a basis for reflection is particularly important given that:

"Some course designers use the idea of encouraging learners first of all to recall a familiar experience, as a preparation for introducing them to a new one. The idea here is that experiences need to be interrogated and perhaps tested and challenged to avoid the unconscious assumptions that may reduce creativity and flexibility in attempting to understand or resolve a problem or explore a scenario." (Salmon, 2002b, 380)

Such considerations form the basis of much of Salmon's work – including the five-stage networked learning model (outlined below). The e-Reflections course built on a history of e-learning initiatives at the University. At Leicester, the early experimentation with e-learning in staff development (outlined above) confirmed that if the implementation was to progress as rapidly as hoped, simply providing technical support for implementation was insufficient. Salmon's work provided a framework that not only emphasises the pedagogy of e-learning but provides a means of deeper engagements with e-learning – both interaction and integration. The five stages of the model had an immediate appeal to teachers because they combine a consideration of issues that motivate students with familiar taxonomies of learning (from Bloom et al in 1956 to the current day) in an e-learning context. Although her research focuses on purely online learning, the potential of applying it to a blended or hybrid model of delivery (i.e. with varying proportions of face-to-face and e-learning delivery) was immediately apparent. The emphasis placed on delivery through 'e-tivities' – (the name Salmon gave to structured tasks such as 'Virtual Lego' and 'Stranded in the Desert')– provides a mechanism that is easily understood and reproduced in context by busy teachers. In Salmon's terms (2002a), e-tivities are "...motivating, engaging, purposeful activities developed and led by an e-moderator" and are, "...in the hands of teachers themselves and promote active learning". Perhaps more importantly, they provide, "...frameworks for active and interactive online learning". The emphasis Salmon placed on the structured reflections of participants on their teaching (or e-moderating) has relevance for the increasing number of courses promoting critical reflection.

Such changes can lead to a fundamentally different relationship between participants and teacher. This necessarily involves participants in reflecting not only on the content and processes of their

own learning, but of that of their students. As such the learning is 'situated', with training provided in context. An important question to answer is whether an increasing engagement with e-learning, "...enables learning to develop as an intrinsic part of the activity of participating in the course." (Salmon, 2002b, 382; after Chaiklin and Lave, 1993).

METHODOLOGY

The 'e-Reflections' framework is intended to facilitate the introduction of collaborative online group-work to a wide range of courses. The objective of this five-week, online course is to enable participants to explore the knowledge and skills involved in online tutoring. An essential part of the course is to involve participants in using e-learning media—discussion groups, virtual classroom sessions (or chats) and web materials—whilst exploring these issues. This is achieved through communicating with other participants working in a wide range of contexts at the University of Leicester and beyond. There are a number of explicit outcomes for the course for potential and current e-tutors. First, there is the opportunity to experience the medium from a student's perspective – a clear need indicated by the feedback from the pilot e-tivities. Second, it provides the chance to the use discussion board and virtual classroom or chat facilities that can bring interactive e-learning to any course. Third, participants are encouraged to reflect on both the materials provided on e-learning and on the model of course design—adapted from Salmon's Networked Learning model. Both are intended to provide a framework to be replicated and adapted in their subject area. Finally, 'e-Reflections' aims to provide an opportunity to explore the technical and pedagogic issues of e-learning, including an evaluation of its impact on learning. From the outset 'e-Reflections' is intended to be as relevant to those introducing e-learning as part of the blend of a 'traditional' course as for distance-learning.

Participants are expected to make a commitment of 15 minutes a day on average. This is designed to enable them to keep up with the flow of the course and make contributions. Whilst the clearly conveyed expectation is that participants would log-on every day, it is made clear that it was possible to miss out some days. The absolute minimum requirement to be able to continue on the course is logging on twice a week. Whilst the course involved a total participant workload similar to a one-day course delivered face-to-face, the control given to allocating that time over an extended period provided considerable flexibility for participants. At each stage participants, are expected to participate in two or three e-tivities.

FINDINGS

Salmon suggests that e-tivities should consist of a 'spark', often supported by resources exploring the relevant topic further, which sets the context for the specific tasks that follow. The purpose of the e-tivities in stage one is to explore the technical aspects of accessing the Internet and the motivation of participants to do so. The former is explored in the first e-tivity in stage one of 'e-Reflections' where participants are asked to describe the environment where they are making their contributions. They are then expected to comment on the contributions of others, with guidance to look for similarities and differences. The tasks at this stage deliberately lack significant difficulty because at this stage accessing the new medium is sufficiently challenging for many participants.

In the Leicester-based courses a significant proportion of participants contribute from work, commenting on distractions in shared workrooms which prevent focus on such tasks. Many academics at Leicester have their own offices—something seen as a luxury in other UK education sectors. As a result, the timing of contributions to Leicester courses tend to show a normal distribution with a peak at the middle of the working day. Whilst contributions outside the 'working day' are not uncommon, access by Leicester academics does not reflect the pattern of access on a typical student course there that peaks in late afternoon with a long tail going into the early hours of the morning. The timings of contributions by academics to the Middle East course did not show the same concentration within the working day.

Much of the early discussion on the programme concerned the time rather than place of the contribution. This reflected that a significant minority of the participants were parents of young

families (6 of 14 participants), imposing structure on their day beyond the workplace. As Participant C concluded, "...everyone has a different style of working".

There was an expectation within the group that 'in-class' persona of a student—for example quiet and unwilling to contribute—would be replicated online. This was, however, countered by some online experience of participants such as Participant who noted, "...sometimes those who might be very shy in class, project a bolder more talkative personality on discussion boards." Participant G also raised the cultural dimension when s/he suggested that Turkish students, "... are often reluctant to make comments when they're not sure what the consensus of the group is. Few of them want to appear too different from their peers. There's no question that this is an obstacle to participation - and naturally this applies to more than Turkish students." In the wider region this reflects what Gillespie and Riddle (2003, P8) call the, "... collectivist nature of Arab culture". They also note that many in business across the region have, "...called for educational reform because of an overemphasis on rote learning and memorization pedagogy common throughout all levels of education in the region" (2003, P5).

They also cite a call for changes to educational approaches that, "...impart skills enabling workers to be flexible, to analyze problems, and to synthesize information gained in different contexts" (World Bank, 2000, P18). Before building up a perception of such cultural difference, it is important to remember that Biggs' forcibly seeks to dispel the cultural myths concerning students from Confucian-Heritage Cultures^[31] (CHCs). He refutes the commonly held view that CHC students frequently struggle when confronted with the expectation of deep (rather than surface) learning in Western HE institutions because CHCs emphasise rote (and hence surface) learning (2003, P125-7).

Among other factors identified in response to the student motivation e-tivity was student background. Participant J noted that "...for adult learners, it can often be that they have defined their own learning objectives and course goals" which can account for a reluctance to participate in discussion boards. It was suggested that background might also give rise to "creative and non-creative" approaches to teach (Participant C). The issue was also raised regarding the extent to which jargon and disagreement with points being made were possible factors resulting in 'lurking'^[41] (Participant D). Indeed as any such course progresses it could be argued that the e-tutor becomes more of a 'legitimate lurker', as their role becomes one of monitoring rather than leading discussions after what one participant described as the "inevitably chaotic" start to such a course in which they contribute (both 'on-discussion' or via e-mail).

A response common to many iterations of e-Reflections is to query why there is no specific 'introductions' e-tivity. Some participants – both in the Middle East and Leicester groups—are motivated by the prospect of sharing such information and getting to know colleagues better at this early stage. Whilst this can be a valuable exercise, it is not used in e-Reflections until Stage Two—Socialization.

Others find that there are enough challenges getting to grips with how and why to use the technology without further challenges. Although the first Stage One e-tivity - 'describe your surroundings' - gives participants the opportunity to share some personal information, how much they share is in their hands. There was also discussion of the use of an alternative Stage One exercise focussed on participants' first names. A previous version of the course had asked participants to use a web site that gives the derivation of their names and share what they find. One reservation about using the name game on the Middle East course was 'how it would play' culturally? In the discussion, not only was it welcomed but Participant C provided a site that covered Arabic names (<http://www.behindthename.com>).

Participant G suggested that this was, "...a good warm-up, a good way to promote some discussion and to help participants to remember one another". As with any such exercise, it depends on the course you are running how much (and how early) you can expect people to share.

Subsequent tasks in this first stage included a consideration of the timing for synchronous chats involving international students (including calculation of time zones). This seemed to have greater

relevance to the Middle East course than had been witnessed on Leicester courses. Similarly, the e-tivity on motivation drew responses of comparable lengths to the Leicester courses. This e-tivity included a consideration of the reasons why students might be unwilling to participate or collaborative creation of a list of the advantages and disadvantages of using e-learning.

The aims at this stage were to provide an effective induction, address concerns (both technical and with content) and encourage recognition of reasons for, and benefits of, participation. Once the e-tivities in each stage are complete, participants are expected to join a group to agree a 50-word statement on something that they feel sums up their experiences in completing the stage. An agreed member of the group then posts the completed statement on the reflections discussion. This will be the lasting contribution of the group to the discussion and will remain for new participants to consider.

The e-reflection can be agreed through contributions to the asynchronous discussion board, a synchronous chat room or a combination of the two. Having completed the first stage of the course—access and motivation - participants were asked to collaboratively reflect on what had been learned and create their own e-tivity appropriate for use at this stage. One group summed up that:

“The important elements of e-learning are timely access to the course materials, engaging e-learning materials, reliable technical infrastructure, and most important, the e-tutor, who facilitates the e-learning experience by encouraging, monitoring, and inviting responses from participants, and ensuring smooth operation of the course. There should also be a contingency plan when things go wrong.” (Middle East Group C)

Although a great deal of online socialization may have taken place from the outset, it is not an explicit requirement of the networked learning model until Stage Two

To require this whilst faced with the challenge of a new medium and a new course might inhibit rather than encourage contributions. The outcome is that participants frequently share information, but they have control of what they share. This apparent dichotomy is frequently noted in group ‘e-Reflections’ at Stage Two where it is suggested e-tivities should be, “... easy to access, interesting, but not too intrusive, as some people may be uncomfortable with giving out personal information.” (Leicester Group feedback, 2004) This group clearly recognises the multiple challenges faced by participants and the need to stage them appropriately.

A further difference was that these initial responses were approximately 50% longer than would be expected from past experience. As is explored below, this first stage does not normally require contributors to share personal information, although describing your home clearly does involve this. Although the home descriptions were brief, participants did readily share their expectations and concerns regarding participating in the process. The differences in length of contributions did not persist in the subsequent stages of the course. The length of contributions is all the more surprising given that many participants commented on slow access to materials. This reflects that most participants who posted details of their internet connections were using dial-up access with speeds of 56 kbps.

The first task used at this second stage of ‘e-Reflections’ was to request participants to create their own student homepage. This might include a brief personal introduction (eg “what you do, where you work, your reasons for doing (and expectations from) the course and what you enjoy about teaching”). Other required information includes an indication of their preferred learning style (with appropriate supportive materials included in the Resources for this stage) and at least one web page that they find of interest relevant to their subject, teaching and for entertainment. Participants are also encouraged to share something of their background and “possibly even a bit of ‘gossip’ about you (such as a hobby, a funny incident or something about your family)”. There is also the facility for each participant to include a digital picture with guidance on how to reduce the size of the file and hence minimise download times. Despite efforts to break these two induction stages down into manageable tasks or chunks, some still find them challenging. In common with Leicester courses, a significant minority of participants choose not to include their photographs, either leaving these out altogether or offering an alternative image. When questioned on why, most preferred not to share a

personal image rather than having specific problems with the technology. The aim at this stage is that participants should feel in control of their own learning, be enabled to support the learning of others and be clear what a learning community is.

The e-tivity exploring the ground-rules for how they should be enforced raised a number of interesting issues. As might be anticipated the 'four taboos'– avoiding religion, politics, sex and alcohol – were readily accepted as part of the ground-rules. As Participant B put it, "I am sure some members from the West will find this as strange as they won't agree with one or more of the items. My response to their concern is they have to be tolerant of cultural difference between societies". The key debate regarded how the ground-rules should be enforced. Overall, the conclusions drawn were reflected in the statement that:

"In the socialization stage, a relaxed atmosphere is important, and cultural respect should be established. The e-tutor needs to build a close working relationship with the e-learners and ensure that every participant feels that his/her contributions are of value. The e-tutor must ensure that the discussions are developing in the right direction" (Middle East Group A)

Part of such valuing is ensuring that negative contributions are dealt with appropriately, as well as encouraging the positive. Thus rather than publicly deprecate inappropriate contributions; the ground-rules could be reinforced on the discussion board whilst making direct representations (in more forceful terms) via e-mail. A further consideration, as Participant K noted, was that, "...many of our students do not have access to the Internet at home or their access is monitored closely by family. The Internet is also filtered extensively in the UAE and the level of filtering is an issue for debate".

The third stage of the networked learning model is information exchange. At this stage participants are expected to be willing and able to exchange information, explore appropriate methods of information exchange and be clear of the benefits. Participants have noted that, "...time management can be very difficult when using the Internet as surfing often leads to unexpected and sometimes useful places". Furthermore:

"Students need to know what is out there, be able to criticise its content, and be able to use it as a complement to face to face teaching. Via a discussion board, guidance from the e-tutor to a few selected sites, and then exercises to review the sites, and then suggest alternative sites could form a useful archive of information." (Leicester Group feedback, 2004)

'E-Reflections' activities at this stage include an evaluation of e-learning materials and a consideration how 'traditional' good teaching would work online.

One of the key developments provided by Salmon's model is that it brings a consideration of the nature of learning to the domain of e-learning. Stage Four addresses the concept of 'knowledge construction' whilst the final stage explores wider development with particular emphasis on reflection and implementation in practice. As one group of participants noted in their group e-Reflection, knowledge construction, "...does justice to the complexity of learning, and is more useful than the idea that knowledge consists of inert facts stored in the memory." Appropriate e-tivities at this stage include creating a group review of an academic article and an exploration of online plagiarism (and how to avoid it). The same group was also prompted to note, "If we think of knowledge acquisition as a complex building process, then we can ... diagnose a phenomenon like plagiarism as the symptom of a problem in this process rather than as a deliberate attempt to cheat." (Leicester Group feedback, 2004). At this stage, there is consideration of appropriate course structure, and both the creation and guidance of effective e-tivities.

The final stage – development – seeks to encourage group confidence and reflection. The majority of groups come to recognise the collective nature of learning for most learners. They also come to value the interaction records from their course as sources of reflection. This culminates in the planning of (including identifying appropriate evaluation methods) of their own e-learning project they are considering as a result of the course. Participants are also encouraged to review the 'e-

Reflections' programme itself. One such group recognised three important ingredients of the programme and the need, "...to structure tasks carefully, developing a progression so that students grow in confidence over time", "...to ensure that tasks are broken down into manageable chunks, and that realistic expectations of what can be achieved are set" and, "...for effective tutor intervention to stimulate and guide the group, and to support individuals" ('e-Reflections' Group feedback, 2004).

Throughout the contributions from the most active Middle East participants showed a wealth of experience in using discussion boards. Thus Participant C noted from the outset noted the need to, "...encourage and ask for opposing opinions" to ensure a healthy discussion, suggesting "...ending the contribution with a question inviting comments & especially opposing ones" (promptly closing with one like a seasoned e-tutor. The fact that the invitation to participate produced a relatively high proportion of academics already engaged in the medium does, to some extent, undermine comparisons with the Leicester-based e-Reflections courses which tend to attract those interested in exploration the medium, gaining experience in it from a student perspective. As Kontos (2001) notes, his institution—which was heavily represented on the course—is, "...considered a laptop university pioneer in the Middle East". Even those joining the course relatively late found it a positive experience. As Participant K noted, "...Now I have a better understanding of what I may tell a late student who joins up in a course that I may offer one day".

CONCLUSIONS

The research upon which this paper was undertaken with the expectation that cultural differences would be highlighted through the data collected from the participation of Middle East academics. Whilst differences were discovered, it is premature to suggest that these were cultural in origin. Participants themselves raised the possibility that the contributions of their students might be inhibited by cultural factors. In exploring the basis of these ideas, Biggs distinguishes between rote learning and the repetition and memorization prevalent in CHCs that forms the basis for deeper learning activities. He suggests it is reinforced by the widespread perception that CHC students, "...are passive; they won't talk in class" –a perception that is only partially supported by the available evidence (2003, P127-8). In addressing the myth of under-performing CHC students, Biggs seriously undermines the perception that Western HE institutions have engaged with deeper, student-centred learning whilst CHCs do not. It brings into question the comfortable perception within Western HE institutions that a constructivist paradigm exists.

Perhaps a more likely explanation of the differences witnessed in this course is the high level of computer literacy among those participating. We planned that further research will determine the reasons for limited participation by some. This will explore the influence of such factors as the 'e-learning comfort' of participants in such reflective online courses.

The contributions of participants in the Middle East e-Reflections course suggests that their comfort levels are higher UK colleagues on comparator courses which appears to have been influenced by a number of factors. First, the high level of engagement with information and communication technology (ICT) identified within the institutions represented. Second, any such approach to an institution requesting participation in e-learning research will inevitably be forwarded to those already involved in it, introducing an element of self-selection. This raised some fascinating discussions but may have inhibited the contributions of those with lower e-learning comfort levels. Most of the early contributors were clearly some way down the path of their engagement with e-learning, which may inhibit contributions from those in the early stages.

Whatever differences may exist between the different groups that have participated in the 'e-Reflections' courses, the potential of the medium for collaborative reflection is clear. As Bain's (2000) concludes:

"It is the 'C' - the communication element (*of ICT*) - which is of key importance here, since it encapsulates the potential of the technologies, in particular Internet technologies, to

formulate new ways of talking to each other, new kinds of communities and new environments for learning." (Bain, 2000)

In September 2004 Gilly Salmon was appointed to the newly created post of Professor of e-Learning, ensuring that staff development in this field would continue to emphasise pedagogy. The University's e-learning strategy written by Salmon in early 2005 represents a framework to support such developments rather than a prescription of the form they should take. Characteristically it emphasises the importance of both pedagogy and staff development to the successful implementation of the strategy.

FOOTNOTES

^[1] Details of the course are available at

http://www.le.ac.uk/staffdev/course_descriptions/ereflections/index.htm

^[2] Participants received two pieces of a Lego kit - a children's construction kit (see <http://www.lego.com>) and using only text on a discussion board, were required to work collaboratively online to design a model using all the pieces provided. Dr Jane Wellens of University of Leicester, created the exercise.

^[3] Confucian heritage cultures (CHCs) are identified by Biggs as East and South-East Asian nations such as China, Korea, Japan, Hong Kong and Singapore (2003, p. 125).

^[4] The practise of reading—but not contributing to— online discussions.

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