

# **e-Learning in Practice – Developing the Leadership Learning Environment**

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## **ABSTRACT**

This paper presents the preliminary lessons that have been drawn from an ongoing e-learning project, which aims to develop an e-learning platform and a suite of fully supported e-learning packages for delivery to individual learners who wish to deepen their knowledge, understanding and practice of leadership within the Learning and Skills sector. These lessons are used to suggest some general learning points about the process of developing, delivering and facilitating e-learning in the Learning and Skills sector.

## **Keywords**

Learning and Skills sector, e-learning, learning management systems, constructivism, leadership

## **INTRODUCTION**

E-learning is a major government policy area (DfES, 2005) and is viewed as the major tool for the facilitation of Life Long Learning in both the UK and International market (HEFCE, 2003). The primary aim of the e-learning project within CEL is to develop, for the Learning and Skills sector, an e-learning platform called the Leadership Learning Environment. The learning environment provides an active and participative approach to learning through collaboration with others. In addition it promotes a culture of 'learner-driven learning' through the provision of facilitator and technical support. In fact a major element in the success of the learning environment so far has been the availability of e-facilitation which supports and guides individual and group learning. A secondary aim of the e-learning project is to develop a suite of e-learning 'leadership' packages which through the integration of their design have an approach to learning which is interactive and collaborative.

The paper begins by critically discussing the learning gateway development project. In this section a focus is placed on the evaluation of a constructivist pedagogy as an appropriate means of developing and delivering e-learning materials which promote a culture of learner-driven collaborative learning. The important message here is the maintenance of the delicate balance between pedagogy and technology when developing and supporting e-learning. Pedagogy often seems to take second place to technology in many discussions about e-learning. We believe that e-learning materials should be developed in such a way that the materials will encourage and motivate learners to construct their own knowledge. In this way we feel that a key element in the success of e-learning is understanding the needs of the learners in their contexts and building the pedagogy with appropriate activities to engage and enthuse them.

In the final section of this paper the author reflects upon the Learning Gateway project to date and identifies a number of transferable lessons for other learning management system developers looking to develop and facilitate e-learning in the Learning and Skills sector.

## **E-LEARNING IN THE LEARNING AND SKILLS SECTOR**

If it is accepted that e-learning is a beneficial means of improving learning and teaching in Further Education then the next primary consideration is what issues need to be addressed when developing e-learning materials and facilitating e-learning within Further Education. Goodyear (2001) has argued that for effective online learning to take place consideration needs to be given to the 'pedagogical, social, managerial and technical issues' concerned. It may be argued that not all of these considerations were valued in initial e-learning developments as it was often the case that traditional face-to-face teaching was simply replaced by the information technology and the role of the

teacher was that of imparting information (Littlejohn and Higginson, 2003). Learning and teaching studies indicate that this mode of learning is unsatisfactory and opportunities are often missed for effective online learning if the assumption is made that online co-operation and collaboration is the same as face to face interactions (Ehrmann, 2001).

Littlejohn and Higginson (2003) have argued that learning is more effective if learners are actively involved and learning takes place through the construction of ideas and the understanding of concepts. In this mode of learning the role of the teacher needs to evolve from that of an instructor or information provider to that of a facilitator who supports and motivates the learner to enable knowledge construction. This form of learning is generally recognized to be more progressive for providing learning opportunities, and is generally referred to as a constructivist approach to learning.

Constructivist learning is taken here, to be underpinned by two basic principles. First, for the learner, learning is not just the acquisition of knowledge, but rather the active construction of knowledge. Second, the instruction supports the construction of knowledge rather than simply communicating knowledge (Duffy and Cunningham, 1996). The adoption of a constructivist framework for the development of e-learning materials is to focus more on the use of tools for the examination of thinking, debate, reflection and the accommodation of multiple viewpoints (CTGV, 1993). The learning is learner centered, participatory and within a collaborative learning environment (Jonassen and Reeves, 1996).

A constructivist approach to learning lends itself well to the available tools and technologies of the virtual environment. The facilitator is not constrained to presenting the material in a linear sequence but rather is able to break the material down into discrete learning objects (Salter, 2001). In this design the learner is able to select materials in a way that will make sense for them to enable knowledge construction (Salter, 2001). This is not to say that the learners initially have the skills required to construct knowledge, but rather that these skills must be developed. It is important when developing the materials that careful consideration is given to the level of guidance or 'scaffolding', to enable the learners to navigate through the 'learning space' (Richards, 2001). This exploration process, which is made up of multiple visits to the learning environment where there is constant activity from the participants, forms new experiences and enables knowledge to be built upon. The periods between visits enable periods of asynchronous reflection (Richards, 2001) in which the learner develops their own personal meaning.

Learning structured in this way can offer essential support and development to participants as they develop their skills in learning online (Salmon, 2004). One such model is the 'five stage model developed by Salmon (2004) which provides the framework for the pace and structure of an online course. The model is designed to 'motivate online participants to build up their learning through appropriate online activities and develop and maintain the pace of the program for the participants (Salmon, 2004). An integral element of the model is the e-facilitator who is required to employ different skills at each stage, beginning with welcoming and encouraging and building up to supporting and responding to the participants (Salmon, 2004).

The debate about e-learning is no longer about whether e-learning has moved on or is the right way forward. The debate is now about the best ways to make e-learning a productive and stimulating experience for learners. Therefore the focus is on the pedagogical and social issues around e-learning and the use of appropriate online activities such as the 'e-tivities' designed by Salmon (2004) which enhance active and participative online learning by both individuals and groups.

## **THE LEARNING GATEWAY PROJECT**

In July 2004 the Centre for Excellence in Leadership set up the Learning Gateway Project team to develop a virtual learning platform and a suite of leadership focused e-learning materials. The complex process of developing the learning platform and the relevant materials has been managed using the PRINCE 2 Project management methodology and their development is based upon three principles regarding our view of developing appropriate e-learning for leaders within the learning and skills sector.

Firstly, we strongly believed that e-learning programmes should be facilitated. Without facilitation, drop-out rates are high and too many learners may become 'listeners and observers' rather than active participants. We believe facilitation is vital to keep energy levels for learning high and to ensure that the learning experience is as productive as possible. It is interesting to note that e-facilitation works in two ways – to stimulate individual learners by

appropriate recognition and involvement of individual learners and to maintain a strong learning community ethos for the whole group, by recognizing the achievements of progression of the whole group.

Secondly, we strongly believe in the concept of a 'learning community. We cannot replicate the physical presence of a learning community with online learning but we can create the three main components of a community of practice which Wenger (2000) describes as 'joint enterprise, mutuality and shared repertoire'. We do this by using the five-stage model of teaching and learning online as explained by Gilly Salmon (2002)

Thirdly, we believe in progression through e-learning. A successful learning experience leaves people wanting more. We want e-learners to be able to continue their learning through a suite of e-learning programmes. This requires us to be responsive and supportive of new ways to organize learning experiences, adopting e-learning in various forms. As suggested above, the e-facilitator plays a crucial role here by helping the community see that it is making progress, showing the 'distance traveled' as a result of the level of debate, and relevance of learning from the different e-tivities. This occurs in regular summaries which are posted by the e-facilitator.

The e-learning project is still at an early stage and currently consists of the two basic strands outline below:

1. The development of specific facilitated programmes to improve individual effectiveness as a leader in the sector
2. The development of a resource bank of existing knowledge which can be drawn upon by the more casual learner

At the start of the e-learning project the decision was made that any e-learning materials that would be developed needed to be interoperable, scalable and re-usable, for this reason a learning object approach to the development of the materials was adopted. The development of discrete learning objects, with the appropriate levels of scaffolding' that would enable learners to engage in the learning space and construct knowledge that was re-usable in different situations, has been problematical. This is because the e-learning experience is fundamentally different to the face-to-face experience (Downs, 2005) and this must be to be acknowledged and incorporated into the design of the e-learning materials. Through the adoption of a constructivist approach learning activities are presented in such a way that the learners existing ideas are challenged and as result the learners need to reconstruct their thinking. This is easier to achieve collaboratively, but can also be done individually through well designed activities. However the process of reflection incorporated throughout the learning materials ensures that ideas change and learning progresses. Knowledge is **pulled** by the participants in line with their needs and the importance of their issues as they are happening. In contrast (and not always) the face-to-face experience can seem like a **push** model, in which through a formal curriculum, knowledge is made available without necessarily connecting it to the issues of the participants.

Our critical evaluation of the process we have used has given us an insight into how to overcome such problems and successfully develop e-learning materials. Interlinked with the practicalities of developing the materials, insight has also been obtained into the role of the e-facilitators, and their relationship with the learners in the virtual learning environment.

## **REFLECTION AND LESSONS LEARNT**

We are struck very strongly from our experiences by the systemic characteristics of e-learning. Any learning process has strong 'emergent' properties. Learners rarely say that the best thing about their learning was that they gained more knowledge about the main theme of the learning whether it's a particular discipline or a subject area. It is more common for them to say that they have increased confidence or access to a useful learning network. In other words the outcome is not a property that the separate parts of the learning process has – it is a systemic property which is 'more than the sum of the parts' We believe that e-learning has great potential in promoting this kind of learning because it has the potential with effective facilitation to promote collaboration and interaction amongst people who have a common purpose, for example, a recent participant on the Leadership Learning Environment commented "*...what a great learning opportunity this has been as I have been able to learn from advice that has been shared with others*". (Catherine Frances White, ILT Facilitator, North Warwickshire & Hinckley College). Interaction of course works in face-to-face situations as well but in e-learning it is the modus operandi rather than a side benefit. Furthermore through the asynchronous discussions incorporated into the materials, periods of reflection

are part and parcel of the process when studying online rather than isolated one off events which can often be the case in face-to-face learning.

The online facilitator must manage a course, guide participants through the learning experience, motivate them, create a dialogue and deal with any conflicts and difficulties (Cornelius and Higginson, 2000; Littlejohn and Higginson, 2003). The role of the facilitator in online discussions is vital in enabling a dialogue to develop and grow. In the online environment the facilitator may use the discussion forums and threads to question students and encourage them to reflect upon their own learning (Littlejohn and Higginson, 2003). An interesting metaphor to try and summarize the learning is a jigsaw; in many learning situations the learning outcome is already fixed. The pieces in the learning process are already cut and lying there waiting to be put together to build the outcome through a predetermined learning process. In the learning design and approach adopted there are multiple pieces to the jigsaw, the facilitator guides the learning process and the learners reflect and interact through the learning process and as such the learning is emergent and individualized.

Clarification and feedback from other learners and the e-facilitator are also essential elements of e-learning (Littlejohn and Higginson, 2003). This can be achieved through the development of activities which encourage reflection before the learners communicate with others online. One way of aiding this process is by appropriate guidelines and guidance being written into the materials.

The early stages of any online course require careful management as they are fundamental to the success of the online course. A number of authors (Richards, 2001, Salmon, 2004) have indicated that in the initial stages of a e-learning program the learners require a level of scaffolding and this can be aided by the e-facilitators being upfront and explicit about when and how often they are in contact and when they will respond and for facilitators to be aware that over time the role of the learners will also evolve as they become use to the technology and begin to embrace the concept of a e-learning community

The initial production of online materials can be expensive, but research is beginning to show that through the use of effective online activities which stimulate and engage the learner to construct their own knowledge the delivery costs can be reduced (Rumble, 2001). The learners need support to develop the skills for working together through 'text based media and online contact with tutors' (Salmon, 2004) and from this we have gained lessons for developers writing e-learning materials. Initial drafts of the learning materials developed by subject authors often had the tendency to be 'heavily text based' with a lack of learner support, often activities were focused on reading and report writing. It may be argued here, that a possible reason that the content authors initially experience difficulties in developing content for the e-learning materials which provided adequate levels of learner guidance. This difficulty may stem from a lack of understanding that the role of the subject expert changes in the e-learning environment, for effective active learning to take place, a dialogue need to take place between the learners and the facilitator, this means that the role of the content author must move on from being an information provider to being a supporter, aiding the learners to becoming more self directed and autonomous (Littlejohn and Higginson, 2003). This change in role needs to be reflected in the design process, and when developing materials the content author needs to keep in mind that they are moving away from information provider to expert questioners and that in turn the role of the learner is also evolving from simply having the ability to memorize information to being complex problem solvers (Goodyear, 2001). Developing the materials in this way also aides the e-facilitator in tackling the perception amongst some learners that e-learning is second best because of the perceived loss of interaction and stimulus (Salmon, 2004).

Within the virtual learning environment visual cues can be lost to both the facilitator and the learners (Littlejohn and Higginson, 2003) and this problem should be addressed by the content author at the time of developing the e-materials, for example we have learnt that the in the development of guidance for e-learning activities the ground rules are vital, clear instruction must provided on why the activity is to be undertaken, how to undertake the activity and reflection upon what has been achieved by completing the activity.

## **CONCLUSION**

This paper has discussed an e-learning project which is in the early stages of developing an e-learning platform and a suite of fully supported e-learning packages for delivery to individual learners who wish to deepen their knowledge understanding and practice of leadership within the Learning and Skills sector. The preliminary lessons drawn from the project has been presented and discussed and primarily focus around the role of the facilitator and

the design involved in developing the interactive online learning materials. The rationale behind their development has been to enable a learning experience which is interactive, collaborative and provides the learners with the vehicle by which to draw upon their experiences and build upon their knowledge. The next stage of the e-learning project is to take these preliminary thoughts and experiences and relate them to the learner experience by collecting and analyzing participant feedback. In this way these lessons can then be used to inform further e-learning developments in Further Education?

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