A Case Study of the Introduction of a New Virtual Learning Environment from the Perspective of Personnel Within the Structure of a College Learning Resource Centre

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Abstract

The application of Information and Learning Technology (ILT) within the education sector has been widespread within college systems for many years. Part of this remit has included the establishment and growth of the Virtual Learning Environment (VLE).

The College within this study is one such organisation that has recently decided to introduce Moodle as its VLE system. Offering courses in both further and higher education it has a variety of faculties and departments, all of whom could potentially be classified as end users of the technology.

The focus of this research was centred on the Learning Resource Centre (LRC) personnel within the College and how the introduction of this technology might impact on their professional role. Investigation also included the person who had been responsible for introducing Moodle into the College and the reasons for its implementation. From these sources information was accumulated allowing for outcomes to be brought to the fore and conclusions drawn.
Part One – About the author

The academic career of John J. Barnes has spanned over twenty-five years focussing mainly within the fields of further and higher education. His early career was spent teaching engineering subjects which eventually incorporated supporting students with additional learning needs. With the advancement of computer technology into the education sector this led him to employ Information and Learning Technologies progressively within his lessons and eventually to teach the subject as part of his curriculum area, with specific reference to student support and key/functional skills.

A further related interest over this time has been in the development of library based support and its evolvement and progression into Learning Resource Centres. In particular this has focussed on how collaboration between teaching and library personnel can develop co-operative working programmes to assist the education of students, especially within the area of Information and Learning Technology.
Part Two – The Issue

The College in which the researcher is located had recently decided to introduce Moodle as its Virtual Learning Environment. This brought forth the opportunity to investigate why it was being implemented at this time and what might be the response of those who would be the users of the technology.

The introduction of Moodle into the College was a recent development and still in its infancy. The opportunity to undertake investigation in this area would present the researcher with the potential to explore its progress to date and produce a study that may be of interest from a College perspective. Consideration was given from the onset that this would be focussed within Learning Support, the area the researcher was based in, with particular emphasis on the Learning Resource Centre and with those who worked in this area.

Apart from the LRC personnel being involved it was also deemed of value to include who had instigated the decision for Moodle to be introduced at this time. Specifically, it was of interest as to what might be the expectations of those within the College who had decided to establish the VLE in replacement of any existing system.

Personal experience in the past by the researcher had shown that the implementation of a Virtual Learning Environment into a college system could have mixed results regarding its successful uptake by both staff and students. Although it is important to grasp its functionality, from a purely operational level, it is also important to have a pedagogical understanding of how it can be implemented as an educational resource.

The situation may exist where it can be perceived purely as a repository for storing material for student access without incorporating its wider operational functions. At the other extreme is the temptation to use it for all educational applications, even when it is better to use a different mode. Experienced educationalists, and those involved with supporting students, need to develop skills where they incorporate the use of technology for its most appropriate purpose.
Part Three – The Literature Review

The Joint Information Systems Committee (2012) define a virtual learning environment as “a collection of integrated tools enabling the management of online learning, providing a delivery mechanism, student tracking, assessment and access to resources”. Further to this the Moodle website (2012) describes their system as “an Open Source Course Management System (CMS), also known as a Learning Management System (LMS) or a Virtual Learning Environment (VLE)” that has become “very popular among educators around the world as a tool for creating online dynamic web sites for their students”.

Martin (2012) outlines how “the use of learning management systems (LMSs), such as the proprietary Blackboard or open-source Moodle software, has become ubiquitous” (p.26). Yaman (2010) states that “Moodle has become one of the most widely used open-source learning management platforms on the internet because of the opportunities it offers to the teachers and students”. (p.148)

Recap (2012) bring to the fore that “Choosing and installing a VLE is an important task and should, ideally, complement a clearly defined and coherent strategy for teaching and learning as well as the use of ICT” and that introducing a virtual learning environment into a school or college requires “a coordinated approach at each stage”. However, they also mention “Whilst the technical specifications for a VLE are important, the way in which a school or college intends to utilise the VLE for teaching and learning is without doubt the most important consideration” identifying the critical area for a “clarity of purpose”.

The wide inclusion of this technology into LRCs has meant that personnel in this field are now part of the mechanism for supporting students in this area. Parry (2010) states “These are exciting times for college library staff, as their work brings them more and more direct involvement in carrying out the teaching and learning purpose of the college”.

CILIP (2012) outline that a White Paper, released by Capita, which looked at how university librarians can make use of technology to improve students experience, reported that “The library remains at the heart of the student experience” and how “the way in which students are using their library services is changing. The rise of the part-time and distance learners has placed new demands on the library service” where “they increasingly want to use electronic resources to compliment the research that they are undertaking”. They further state “libraries that listen to their students and proactively address their requirements are reaping the rewards” with mention that this includes where “they free up library staff to continually improve services on an ongoing basis” (p.7).
The implementation of the technology, however, does not necessarily mean its success. Jarvis et al. (2011) state that “Explanations for the pedagogical failure of current VLE technology focus on the mismatch between the delivery model and current understandings of learning and cultural norms for how technology is used outside formal education” (p.84).

Harrop and Seddon (2012) describe how, in helping students to view skills for such as research and information literacy “the intensive sessions, which encourage an individual approach, could not be easily translated to distance learning or VLEs”. They see this as a common problem which needs to be addressed by “those working in library services, as well as curriculum teams, in order to create a culture where the research process is valued amongst those studying on vocational or work-related courses” (p.45).

Such understanding would arguably require a level of co-operation between teaching and library personnel. However, Parry (2010) outlines where it can be “quite difficult to encourage tutors to liaise with study centre staff over creating resources. Some tutors still do not use Moodle to support their courses and they will need to be persuaded and trained in its use”.

Training, however, is also an important factor for personnel employed in Libraries and Learning Recourse Centres. Loveland (2012) outlines that “Professional development is increasingly important as librarians in all fields look to improve their knowledge base and stay on top of new technology, legislation and work practices” (p.36).

Thomas (2013) brings this to the fore with the ongoing of developments in this area “the University of Derby Online, which has recently introduced an app to allow mobile access to its VLE, thinks that the advent of free Massive Online Open Courses (MOOCs) is forcing traditional universities to raise their game” (p.43).

It is this continual advancement of the technology that requires Learning Resource Centre personnel to remain up-to-date with developments. CAPITA (2012) report Annie Mauger, the CEO of the Chartered Institute of Library and Information Professionals, reflecting on the sector stating “It is a challenging job – technology has to be there as a tool for the best maximisation of resources”.
Part Four – Initial Proceedings and Methodology

When considering any area for research it is important to select the most appropriate method of investigation. The EIPPEE (2011) outline “Researchers must consider which of the diverse methods used in research are most appropriate for answering the questions they want to investigate. The choice of methods and the way in which they are implemented will largely be determined by the research questions” but will also be influenced by “practical considerations, such as the availability of resources”.

Consideration was given to a number of methods at the beginning of this process although the following information from Blaxter et al. (2010) was deemed the most appropriate “The case study is, in many ways, ideally suited to the needs and resources of the small-scale researcher. It allows, indeed endorses, a focus on just one example, or perhaps two or three. This might be the researcher’s place of work, or another institution or organization with which they have a connection” (p.72).

Sharp et al. (2002) outline that within a case study approach the researcher may spend a period within an organisation and the comments and conclusions that can emerge “will be solely based on their experiences in that setting” (p.15). This would be indicative of the position of the researcher in this investigation.

Before proceeding further, the ethical aspects of the study had to be considered. Robson (2002) recognises this when he says, “It is vital that at a very early stage of your preparation to carry out an enquiry you give serious thought to those ethical aspects of what you are proposing” (p.65). To begin to make progress it was important to gain permission to commence such a study. This needed to be discussed with those in authority at the College and for them to agree and give their co-operation. As such, a meeting was requested with the Learning Resource Centre Manager at the College.

On being granted this request a full explanation of the undertaking was outlined to them and through further discussion the theme emerged for this study. The focus was to be on the personnel within the Learning Resource Centre in relation to the College having recently introduced Moodle as its Virtual Learning Environment. This provided a mechanism for potential participants to be identified who could be approached and invited to take part in the research activity for data gathering purposes. The LRC Manager supplied the names of these potential participants through email communication at a date shortly after the original meeting. This consisted of details of the five personnel who worked in the Learning Resource Centre and of the Manager herself as a partaker.
To begin to assess which of the six personnel would be interested in taking part an email was
forwarded to them all. It explained fully the reason for being contacted and gave a brief summary of
the nature of the research. They were asked to confirm whether or not they wanted to participate in
the study. This resulted in two replies confirming an interest to participate. Further to this, a second
email was forwarded to all of the LRC personnel outlining the decision to undertake interviews and
again inviting participation. Of the original six LRC personnel contacted, only the same two replied
confirming their original interest.

Apart from the LRC personnel being participants it had been considered that it would be of value to
explore the same subject with the Technologist who was responsible for introducing Moodle into the
College system. An email was forwarded which resulted in agreement from him to participate. This
inclusion would allow for a comparative element to be introduced within the study in conjunction with
the feedback from the LRC personnel.

Having gained the permission and co-operation of the individuals involved, attention was next
focused on how this enquiry was to proceed. The main theme was to take the form of a piece of
“qualitative research” to reveal, as described by the Qualitative Research Consultants Association
(2012) “a target audience’s range of behavior and the perceptions that drive it with reference to
specific topics or issues”. To begin, information had to be collected. To do this, a mechanism had to
be devised for identifying how the LRC personnel related to the introduction of the new VLE.

Originally, consideration was given to using questionnaires in conjunction with interviews as data
gathering techniques. The use of a questionnaire had potential advantages in that it was anticipated
that such a technique would be non-threatening for the LRC personnel as it would reduce the risk of
knowing who had, and who had not taken part, so protecting anonymity. However, the issue of
participation with such a technique has been commented on by Robson (2002) who states “A low
response rate is a serious and common problem with self-completion questionnaires” (p.238). As the
initial email inviting the LRC personnel to participate had only solicited two responses of participation
it was decided not to proceed with this method but to amalgamate the original questions from the
questionnaire into the interview process.

The decision not to incorporate the use of a questionnaire, in conjunction with the interviews, would
mean that the research activity would not have, as described by Jupp (2006) “the observation of the
research issue from (at least) two different points”. Although this is acknowledged, from the
perspective of triangulation, it is also reiterated that, from a data gathering standpoint, questions
originally designed for questionnaire delivery were not excluded and were integrated into the interview
design.
Blaxter et al. (2010) further relate to the importance within research of reliability and validity. They outline that reliability is the concept which “has to do with how well you have carried out your research project” in that, should it be conducted by another researcher “they would come up with essentially the same results” (p.245). They also reflect on validity having to do with “whether your methods, approaches and techniques actually relate to, or measure, the issues you have been exploring” (p.245). All of the questions asked of the participants were planned to relate to the introduction of Moodle into the College system as its new Virtual Learning Environment with the same process for the Technologist, but incorporating minor alterations to accommodate the fact that he was not part of the LRC personnel.

The formulation of the interview questions were designed to fall into four main categories of investigation:

• Virtual Learning Environment/Moodle
• Continual Professional Development
• Application
• College Interaction

Considerations for what Turner (2010) describes as “interview design” (p.754) were adhered to for the purpose of maintaining consistency throughout the activity. Such a guide would prove to be useful in developing the process for the interview application since the use of consistent questions, for example, would facilitate the collection of similar data from each respondent. This format, it was also envisaged, would give a clear focus to the interview and enable successful management of proceedings.

The decision also had to be made as to whether an unstructured, semi-structured or structured method of questions were to be incorporated. The following advice was adhered to as outlined by the Information Management Associates (2009) “You can combine closed questions (such as “Do you ever go to the company information centre?”) and open questions (e.g. “What kinds of use do you make of that service?”)”. This approach combined the advantage of structure with the possibility of being able to investigate at a deeper level if required and was used within the question design.

Consideration also had to be given to the technique of recording the interviews. After enlisting various ways of doing this it was decided that the best approach would be to record proceedings using a voice recorder. These instruments, Yin (2003) states, “certainly provide a more accurate rendition of
any interview than any other method” (p.92). It was, however, felt that not all of those interviewed might be in favour of this technique of recording and in such instances written notes of responses would have to be made.

A pilot study of the interview questions was finally conducted to allow for any anomalies to be addressed and changes to be made before the interviews were arranged to be undertaken.

To organise times for the interviews to take place an email was forwarded to the LRC personnel who had agreed to take part. Within this communication was a series of proposed dates and times requesting availability. The same email request was forward to the Technologist. Replies from those invited resulted in dates and times being set into place. The interviews were conducted over one day within the College. They were undertaken in a room were the interview process could not be overheard. The length of the interviews varied from 15 to 20 minutes. No participant objected to the use of voice recording. All of the interviews progressed as anticipated with no areas of concern. The voice recordings were clear and audible.

The next stage was to convert the recordings into hard copies so that analysis could begin. Each of the interviews was transcribed verbatim. Editing only took place to remove sensitive or confidential information, such as personal names, or where the interviewee’s answer went off at a tangent to the area of information being sought, which was rare within the activity.

The transcribing, however, constituted only the first stage of processing the data. Patton (2002) outlines how data interpretation and analysis involves “making sense out of what people have said, looking for patterns, putting together what is said in one place with what is said in another place, and integrating what different people have said” (p.380). As such, all interview transcripts were analysed and the response from each of them was highlighted and labelled according to category. From this, clusters and themes emerged which were identified and grouped together. In particular, the feedback from the LRC personnel was placed in comparison to what was said by the Technologist. This was conducted in order to look for similarities or differences and for deductions to be made and conclusions to be drawn.
Part Five – Findings from Interview Transcript

The interviews began by establishing the roles of each of those taking part. The Learning Support Centre personnel consisted of the Learning Resource Centre Manager with the other participant describing their position as Librarian. The person responsible for Moodle described their role in the College as looking after the VLE system with their job description being that of Technologist.

Virtual Learning Environment/Moodle

When asked what they understood by the term Virtual Learning Environment, the feedback from the LRC personnel referred to it as “a vehicle for learning things”, “a vehicle for learning resources” and as “something on-line with resources, links, assessments”. The Technologist mentioned how it was an “interactive resource” which took learning outside of the classroom “rather than the conventional chalk and talk teaching”.

The question of whether it was considered that a Virtual Learning Environment had potential value as an educational resource brought responses from the LRC personnel that it had with one stating “the kids these days don’t want to do everything on paper they like to do things electronically”. The Technologist also agreed with this view with comments referring to how this had been “proven across the globe” where “Lecturers notes and resources will be put on a Virtual Learning Environment before the actual date of the lecture, so students can research the topic they will be talking about in the lecture”.

When asked on how important they saw a Virtual Learning Environment as being part of something associated with the Learning Resource Centre, comments from the LRC personnel included “really important” and “I think we should be on it”. There was also mention that “if you don’t put the learning resources with the learning materials in the curriculum areas you might not get the students to find them” and how such things should go “hand in hand”. The feedback from the Technologist included “The Learning Resource Centre should be key, and at the heart, of all the learning that a college does” and the VLE “will help to pull all the resources across the College into one place”.

The question was posed as to awareness of why the College had recently introduced Moodle as its Virtual Learning Environment. Within the LRC personnel it was stated “We had a Virtual Learning Environment called Learnwise which ceased to be supportive, so the College had to think of something else…. they brought something called SharePoint in which has obviously not worked”. There was also mention that “Ofsted was on about ILT in the curriculum and what we were doing, and we weren’t doing enough so, therefore, we had to do something”. 
As to whether the LRC personnel saw any advantages of introducing Moodle into the College brought the response “We have got a lot of distant learners, lot of part-time learners, anybody who is not on-site can access stuff” and also how it would “benefit the staff with marking and keeping in touch with the students”. However, there were also concerns “Moodle or anything else, it is going to take a while for the staff to buy in and to understand it and to learn how to use it”. This latter point was also reiterated by the Technologist “The advantage is that it is going to cut down on admin work for staff. Not now, but in a few year’s time when Moodle really starts working for them”.

The question was also asked whether there was an awareness of any disadvantages of introducing Moodle into the College. Feedback from the LRC personnel focussed on staff and their interaction with “ILT in the curriculum” where it was perceived that “a lot of the staff aren’t particular technology minded” and there was a need for “getting staff on board”. The Technologist stated how there was a lot of students that were “coming in now with the skills, the IT skills to use Moodle. I’d say the staff aren’t quite there yet, so they are behind the students on that”.

When asked do you use Moodle the LRC personnel said that they did. It was used for putting links into Journal databases and the library catalogue and where it was “now the home of all library resources”. It was also used for “doing library information skills sessions with the students”.

On the subject of what level did they consider their existing skills for Moodle the LRC personnel saw it as being “beginner” or “basic” with regards to adding or creating material for the VLE but better than this for actually using the application. This was agreed with by the Technologist who said that the existing skills for Moodle of the Learning Resource Centre personnel was “at basic admin skill level at the minute. They can add files, they can put up notices, they can change a few things around”.

**Continual Professional Development**

When the LRC personnel were asked about what training for Moodle they had undertaken within the College, feedback included “Nothing” and “very little, actually”. There had been “a demonstration at the beginning of term” and feedback of taking part in “one generic session with the Moodle developer, who showed us, basically, what it could do and what it looked like and then probably one session with him and another colleague on how to put things on it” but this had totalled “Only a couple of hours at the most”.

Further to this the LRC personnel were asked if they would undertake training for Moodle in the future if it was offered them. The general consensus was that they would but one mentioned that they would like this to be “on different levels because I don’t want to do something basic. I can do the basic stuff”. The Technologist was asked as to what future training for Moodle was planned for Learning Resource
Centre personnel. He outlined that “The next stage is looking at the interaction of Moodle and to make it a proper Virtual Learning Environment rather than just a file storage area”.

With regards to any potential future training for Moodle the LRC personnel were asked how they would like to undertake this. Responses outlined “a mixture of stuff” but would also be “quite happy to do on-line training” on their own. There was also mention of training being preferred “in very small groups, in College, probably with my own team to start with” although there was also recognition where “it needs to be wider than my team and I’d like to see, from a member of the teaching staff’s point of view, how they use it and how we would blend our stuff in with theirs”.

The question was posed to the LRC personnel as to whether they should have to learn how to use Moodle. Feedback concurred that they should “Yes. I think you should be made to use it. We are trying to not just have stuff on the library page but have things on the department page” explaining further the need to “link stuff into the curriculum pages”. The Technologist was asked whether Learning Resource Centre personnel should have to learn how to use Moodle and responded that as they were “on the front line of the student body” that they should.

When asked whether having to learn to use Moodle was the inclusion of an additional workload the LRC personnel stated that it was but “we have been waiting for Moodle, or something similar. It’s the best way of getting our electronic resource out there and accessible, so we need something to do it”. The Technologist explained that although he considered that Learning Resource Centre personnel having to learn to use Moodle was the inclusion of an additional workload it was “like learning any new skill” and that “the benefits will outlay any extra workload”.

**Application**

When the LRC personnel were asked did they think that Learning Resource Centre personnel being proficient in using Moodle was beneficial from an education perspective there was agreement that it was and how “More and more of our stuff is on-line and students are asking for help” in this area.

The LRC personnel were further asked did they see the potential use of a Virtual Learning Environment to be an extension of their original professional role or as being something that was a different approach. Replies included “No, it is embedded now…. Couldn’t possibly do the job without something like it” and that it was “just the way times have gone”.

Carrying through with this theme the LRC personnel were ask in what way did they interact with Moodle. Feedback focussed on providing access “to the library’s electronic resources and to show students where things are”. It was also used for course participation and “to develop”. The
Technologist said that the LRC personnel had some content already on Moodle “which they can administer themselves”.

With regards to access the LRC personnel were asked how they engaged with using Moodle. Feedback revealed that, within the College, this was through the use of a desktop or iPad. With reference to the latter it was commented “We have got an iPad for going out roving, so we can take it out to different places around the campus now that it’s WiFi-ed”.

When asked were they aware of any reasons why Learning Resource Centre personnel would not engage with using Moodle replies included “Yes, only the same as why teaching staff wouldn’t, they are frightened of it” and mention of a “lack of time to get used to it”. This last point was also included in the feedback from the Technologist “The only reason I can think is it would be down to time management or a feeling that, well, it is probably a lack of training or what the benefits are”.

Feedback was also solicited as to what subject areas the LRC personnel considered would benefit students from them assisting with Virtual Learning Environment applications. There was agreement from the LRC personnel that it would be all areas within the College. There was, however, acknowledgement that not all areas might have the same input.

On asking the question as to whether the LRC personnel were aware in what capacity students engage with Moodle, feedback included “Not yet” as it was very new to the College and “from nothing, to a fair bit”. There was feedback that “the equine students” were engaging with Moodle and how this was seen to be due to “the amount of material and the amount of pushing that the teachers have to do”. But this was not in all curriculum areas “If the staff haven’t got stuff on there, and they are not on a higher level course where they want to use the library resources, then it is just passing them by really”. The Technologist, who had direct access to the College Moodle data said “we have got 2500 students registered on Moodle. We are getting about 800 hits a day on the Moodle website itself and various areas of the College, such as equine, food and engineering, are really pushing forward with their use of Moodle.

The question was also asked as to whether the LRC personnel considered that they had sufficient skills to help and support students in the use of Moodle. The feedback from them was that they had but were not suitably clear about the academic side “unless you are on a course, and enrolled on a course, you can’t see that”.

The LRC personnel were next asked whether the students expected them to be Moodle literate. The reply was that they would and that “As long as they are they would probably assume we are”. This point was agreed with by the Technologist who answered “I would hope so because they may not be seen as teaching staff but they should be seen as a resource that the students can use”.

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The LRC personnel were further asked as to whether they worked or liaised with subject lecturers in Virtual Learning Environment development. Feedback reflected that largely they didn’t “The few I have approached to say ‘could you do this’ usually haven’t really cracked it. Liaising with academic and curriculum is a big thing generally, whether it is with the VLE or not”.

Following the same theme the LRC personnel were asked whether they worked or liaised with other College personnel regarding the Virtual Learning Environment. Replies included “Yes, with the Moodle developer” and also “A bit. I’m on Twitter”. The Technologist replied that the LRC personnel worked with “people such as our Functional Skills Co-ordinators to add resources onto Moodle”.

On enquiring whether there was a College policy on the use of Moodle the LRC personnel replied with “Don’t know “or “I don’t think so”. However, the Technologist stated “There is a minimum requirement. There is no policy set out as such because this is the first year, it’s a trial year” but how “The policy will start to be written towards the end of this year”.

When asked if they had considered undertaking research or other development work in line with Moodle the LRC personnel replied that they hadn’t. However, the Technologist replied that he thought “all staff should be undertaking research as part of their jobs, as part of their Continual Professional Development”.

The LRC personnel were finally asked if there was anything else that they would like to mention or bring to the fore. Feedback included “the academic staff, at whatever level, needs to be made to use Moodle, to make the students use it” and where it was thought “with Moodle it seems to me to be as good as people’s imaginations make it”. The same question was also put to the Technologist who answered “I think it is early days on the Virtual Learning Environment so far. It is a new step for the College to go down this road of using Moodle as a proper VLE and early feedback says the students do enjoy using it and the staff are getting to grips with it and the benefits are already showing so, it’s on the way up”.

College Interaction
Part Six – Discussion and Conclusion

The focus of this research concentrated on Learning Resource Centre personnel and their perspective of the introduction into their College of the Moodle Virtual Learning Environment. Initial enquiry at the beginning of the interview process established that the LRC personnel understood the basic fundamentals and purpose of Moodle. The Technologist, through his position as the person responsible for introducing Moodle into the College, displayed an understanding for the wider functions of the technology.

The reasons for introducing Moodle at this time were perceived by the LRC personnel to be largely twofold. The first focused on how systems introduced into the College in the past had not met the requirements for an effective VLE to be established and that there was a need for such a system. Secondly, there was feedback from a recent Ofsted inspection which had mentioned the College was not doing enough with ILT in the curriculum.

Perceived advantages, by the LRC personnel, for introducing Moodle focussed on how this would be particularly useful for students who may not be based on-site in that they could gain access to what was required in connection with the courses they were undertaking. Potential for instant feedback from some of the assessment functions was also seen as being advantageous. It was also mentioned, however, that such future actions would be subject to curriculum staff being proficient in this area as it was perceived that many were not. The Technologist added to this theme in that he perceived students were arriving in colleges who were skilled in using Moodle due to what they had learnt at school. This brought to the fore the need to have staff training in place as a matter of priority.

Future CPD was something that was perceived as being welcomed by the LRC personnel who saw their existing skills in Moodle as being basic for the creating element of Moodle but more extensive for using the applications. Such future development had been visualised by the Technologist who saw Moodle application moving from that of it being used as a document storage device into a more interactive mode, into a Virtual Learning Environment.

With regards to application the LRC personnel were using Moodle as their focus for all library resources and for training sessions with students. This was enabling them to engage with some of the functions available within the VLE. This development boded well for any future investment within the Learning Resource Centre especially as Moodle had only been in place for a few months yet had been embraced by those in this study. It was also acknowledged by the LRC personnel that engaging with the use of Moodle was perceived as being something that was part of their professional practice and embedded in their work reflecting the changing role of those within the sector.
The training undertaken by the LRC personnel had been limited to only a few hours worth of CPD. However, this had proved to be sufficient in establishing the beginnings of implementing the technology into the LRC systems and although having to learn to use Moodle was seen as being an additional workload it was also seen as one that was necessary and should have to be acquired. The consensus for this was largely associated with the requirement for having to access the LRC based electronic resources and the need to be able to show students how to do this.

The format of any future training was seen by the LRC personnel as something they would like to initially undertake within their own area. The delivery mechanism for this CPD was seen as something that would consist of a mixture of ways, including on-line. However, there was also acknowledgement for the need to engage further than this through gaining an understanding of how teaching staff used it and how this could be blended between areas. Such an understanding would offer the opportunity for liaison between the LRC personnel and curriculum areas where collaboration could take place on Moodle. Such proficiency in the use of Moodle by the LRC personnel was also seen by them as being educationally beneficial, especially as a means for supporting students within the Learning Resource Centre.

Although the LRC personnel did consider that they had sufficient skills to support students in the use of Moodle this was not necessarily from a curriculum subject perspective but rather from the viewpoint of locating material. Nevertheless, it was considered that all student subject areas would benefit from Learning Resource Centre personnel assisting them with Virtual Learning Environment applications. They also mentioned, however, this as being an area of concern with regards to the material actually being there for the students to access and how this would be dependent on the input in place on Moodle from the different curriculum areas. This raised questions with regards to teaching staff themselves being proficient in VLE engagement and having the ability to use Moodle as an educational resource.

Although there was some unsurety from the LRC personnel with regards to the exact capacity in which students were engaging with Moodle there was feedback that this was in relation to the students having material from their curriculum area to access and also of teaching staff leading them towards this. The Technologist concurred with this viewpoint identifying certain curriculum areas being proactive in Moodle. However, one area with regards to Moodle where it was acknowledged there was ongoing work and liaison was between the LRC personnel and the Technologist. Interestingly, the Technologist mentioned that the LRC personnel worked with the Functional Skills Co-ordinators in adding resources to Moodle, a point not mentioned by the Learning Resource Centre personnel themselves.
Reasons why LRC personnel might not use Moodle brought to the fore that this could be because of a lack of time to get used to it or that they were frightened of it. This was not evident from the LRC personnel who took part in this study. However, one area that could not be explored further was why four out of the six Learning Resource personnel did not reply to either of the emails requesting them to participate in the research. Although it was anticipated at the start that, perhaps, not all of those asked would choose to participate, this level of incompliance was unexpected, especially as the LRC Manager had forwarded names of potential participants within this small group. However, to draw any conclusion from this would be purely speculative. It does, nevertheless, present the opportunity for further study to be undertaken to explore why and, although the LRC personnel had not considered undertaking research or other development work in line with Moodle, this may present an opportunity to do so at some time in the future. Such an undertaking had been envisaged by the Technologist who considered that all staff should be engaging with research as part of their work and their Continual Professional Development.

Perhaps some of the themes identified in this study could have had a place of direction within the structure of a policy on the use and application of Moodle. However, from asking the LRC personnel whether there was one within the College the response was that they didn't think there was. Such an undertaking would have the potential to lead the development of Moodle, not only within the Learning Resource Centre itself, but also in bringing the technology into the different curriculum areas of the College. The opportunity for advancement of this had the potential for fruition as the Technologist had identified that a College policy for Moodle was to be developed within the future.

Possibly an element of this future policy might include the drafting, or something similar, for a repetition of this type of study. This could be used as a measure of potential change regarding the implementation of Moodle and in identifying its progress within the Learning Resource Centre and the wider College community in general.
References


John Barnes

The academic career of John J. Barnes has spanned over twenty-five years focusing mainly within the fields of further and higher education. His early career was spent teaching engineering subjects which eventually incorporated supporting students with additional learning needs. With the advancement of computer technology into the education sector this led him to employ Information and Learning Technologies progressively within his lessons and eventually to teach the subject as part of his curriculum area, with specific reference to student support and key/functional skills.

A further related interest over this time has been in the development of library based support and its evolvement and progression into Learning Resource Centres. In particular this has focussed on how collaboration between teaching and library personnel can develop co-operative working programmes to assist the education of students, especially within the area of Information and Learning Technology.