Innovations in MLE training at the University of Hertfordshire

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Abstract

In the past StudyNet training at the University of Hertfordshire has consisted of a teacher standing at the front of a classroom demonstrating the features of the system with opportunities for participants to try the features for themselves. It has been unclear if participants have learnt anything or if the materials covered have been relevant. The level of interactivity between teacher and participant and between participants has often been low. Recent changes to teaching methods have increased interactivity and provided feedback for use in aligning learning objectives with learner needs. The use of problem based group work based around real life examples has put the materials into context. This paper is a personal reflection on whether these changes have been successful and how the training might be improved in the future. It was found that sessions were more fun to teach and that participants appeared to engage more fully with the material, the trainer and each other. A brief experiment with StudyNet quizzes suggested this might be an area for future development. A series of short quizzes at key points throughout the session would give participants opportunity to reflect and let the trainer know if the participants have learnt the materials.

Introduction

The University of Hertfordshire uses a Managed Learning Environment (MLE) called StudyNet to manage the students' learning experience and to supplement the face to face learning experience offered by teaching staff with on-line teaching materials. The MLE has been written in-house using Lotus Notes as a development platform and has been in use by teaching, administrative and technical staff since 2000. It is developed further each year and now incorporates a huge number of different features. An important consideration is how University staff can be educated in the use of StudyNet. Tutorials and manuals are provided on-line but face to face training sessions on various aspects of the system have always been a key method of introducing new University staff to StudyNet and updating and improving the skills of existing staff. The participants in the sessions are all adult professionals with considerable experience and knowledge in their subject areas but with varying levels of comfort with computers. Teaching methods need to take this into account (Imel,1994). In this document I will discuss some of the challenges faced in these training sessions, the steps I have taken to overcome them, and how the sessions can be improved further.

Discovering participants' needs and prior knowledge

One of the three-hour sessions that has run regularly for about two years is aimed at administrators at the University who deal with student registration. It is entitled "StudyNet for Administrators". The aims of the session are to give these staff an introduction to StudyNet and to enable them to use StudyNet to support them in dealing with student

problems and queries. This is the only session run by my team that does not involve mainly academic staff and the needs of administrative staff are less well known to us. I find they are generally less communicative of their needs and appear far less confident in expressing themselves in stark contrast to academic staff who are generally very vocal.

The "StudyNet for Administrators" sessions have not always gone that well. The participants have tended to look blank, not ask many questions and it has been hard to tell at the end whether they have learnt anything. It is possible that a suitable atmosphere for adult learning where participants felt able to contribute (Fry, Ketteridge & Marshall, 1999, pp.10-11) was not being provided. After more successful sessions participants would say thank you as they left and might ask more questions while the session was in progress but it was not clear why these sessions had worked better. There may have been more experienced, confident staff present who were better able to interpret the information provided and fit it into their own experience. Moon (2004) refers to Kolb's theories of experiential learning highlighting the importance of prior knowledge. Moon (2004, p.71) describes how a person might view a new leaf differently depending on their prior knowledge. Someone with prior knowledge of autumn in a temperate deciduous woodland might see a red leaf differently to someone who had only experienced evergreen woodland. She states that "the process of learning involves the bringing to bear of relevant prior knowledge". Due to a lack of awareness of the prior knowledge of University administrative staff, the information was not being presented in a way which would link to the participants' previous experience making it harder for them to assimilate it.

It is unclear how the original learning objectives were chosen. They may have changed or perhaps were never identified in a way that would allow them to align with the participants' needs. Knowles (1973, p.109) states "responsibility for planning is assigned almost exclusively to an authority figure (teacher, programmer, trainer) ... this practice is so glaringly in conflict with the adult's need to be self-directing that a cardinal principle of andragogy ... is that a mechanism must be provided for involving all the parties concerned ... in its planning." In an ideal world the session would be re-developed by a group including Faculty Registrars, the Procedures Unit and student-facing administrative staff. However this would take a long time to produce results. An alternative approach was taken and is described here, where the teaching methods were analysed and changed to involve the participants to a greater extent to see if they could provide the information needed to improve the session.

Teaching methods in the past have simply involved the trainer standing at the front talking and showing examples using a projector connected to StudyNet. As the current trainers felt unsure how the learning objectives aligned with what the participants were hoping to learn, they were unable to relate the tools to the participants' real working life experiences and the participants had no motivation to engage with the materials provided.

Without re-planning the session, the only people who could help were the participants themselves. By starting to interact with the participants, it should be possible to find out

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what problems they were experiencing and how they could be solved using StudyNet. Initially the participants were asked at the beginning of each session to say what they were hoping to gain from the session. This provided some useful information but not all participants knew why they were there. Some were new members of staff and others had been booked on the course by their managers with no explanation why.

More of a dialogue was needed. Questions were introduced throughout the session. For example one learning objective is that the participants should be able to email all those enrolled on a particular module. The participants were asked if they had ever needed to send such an email and why. This helped both the trainer and the participants to understand the context of the task being taught, broke up the session (perhaps resetting attention spans) and gave the participants the opportunity to learn from each other. In a class made up of adults, the students' knowledge and experience will often be as valid as that of the teacher (Lindeman, 1926 cited in Smith 1997, 2004).

The value of student knowledge is an interesting, if challenging concept. Modern teachers are pulled between a desire to provide authority in the classroom and the desire to make the educational experience more informal, open, relevant and exciting by sharing the knowledge and experience of the students in the classroom. Teachers may feel they are not justifying their pay if they do not come across as more knowledgeable than their students. Preferable is a middle way where, if the teacher is confident in their own knowledge and their ability to facilitate a session well, student contributions can be valued and respected and used to enrich and even direct the content of a session without undermining the teacher. Each session can be informed by student contributions from previous sessions so the teacher learns from the students and acts as a conduit of information from past to future students.

Using problem centred group work to provide context and allow participants to learn from each other

One particular section of the session mentioned above, relating to a tool called the Module Problems Reporter, was particularly problematical due to the complex and dry nature of the content. In StudyNet, each student has access to a personal main page (portal) that contains links to all module websites that the student is registered on. The Module Problems Reporter allows University students to register problems with missing or incorrect module links in their StudyNet portals. It also automatically detects discrepancies between the modules that are running and the modules the students are registered on which would be likely to lead to students not having access to the correct module websites. This is a very important tool for the University because the student experience is adversely affected by missing module links and administrative staff need to use the Module Problems Reporter to help them fix the problems quickly. Staff agree that these problems are important but many say they do not know how to solve them. The tool looks quite intimidating. There are usually some session participants with more experience of resolving module link problems so it seemed like a good opportunity for participants to learn from each other. In the past there has been a tendency for trainers to

skip over this tool or to cover it in insufficient depth because it is considered hard to teach. This perception may be because a teaching method aligned to the learning objectives has not been used.

The tool needed to be put into a context that would be familiar to the session participants and so a realistic practical element was introduced. The participants would have the opportunity to use the Module Problem Reporter in the session to solve real problems supported by colleagues in a small group. This approach was inspired by problem based learning (PBL), a well aligned teaching method "where students solve professional problems, the assessment is judging how well they have solved them" (Biggs 2002, p.1). The class was split into small groups of three people. After seeing a demonstration of the Module Problem Reporter, each group was given one of three real life problems to solve. For example "A student comes to you saying they registered for module 1COM9876 but they cannot see a link to it in StudyNet. How could you solve this problem?". Or "A lecturer comes to you because none of the students can see the lecture materials. How could you solve this problem?". Each group had to consider the problem, use the Module Problems Reporter to find out more, and then suggest a solution. There was not time for all the groups to report back so each group shared the answer for one problem. Before trying this approach, participants looked very blank after the Module Problem Reporter section of the session and it was not clear that they would have been able to use the tool. Expectations of the groups' answers were not high. However the answers reported were of a good standard, indicating the participants had engaged with the materials. Participants took away all three problems and model answers so they could refer back to them.

The literature around problem based learning suggests that the students be left very much to their own devices but in practice it was necessary to demonstrate the tools before letting each group consider their scenario. The groups were monitored by the trainer and a couple of the groups did need some extra direction on how to find the tools or which aspects of the tools would be most suitable for the problem. In a one off session with participants using completely new tools it seems inevitable that some support would be needed but it is possible that the practical application of the problem based group work idea had been lacking in some way, causing the groups to need more support than is usual. Further research into the problem based learning concepts which had inspired our approach suggested that learners need support or "scaffolding" which is gradually withdrawn as learners develop their skills and that problem based learning should not be seen as a purely discovery driven approach (Hmelo-Silver et al, 2007). On reflection the amount of support given does not seem unreasonable, particularly for a first attempt. On the whole the groups did work independently and the help given was the minimum needed to get groups that were stuck working again.

The only negative point was that the exercise had taken some time to prepare. As real live problems were used involving real University student data, the exercise would need to be reworked for each session with suitable current real life problems being chosen. However as the exercise worked well I think the results would justify the time spent.

Another experiment in this session involved the identification of groups. Each group selected a small object from a selection which mainly included small cuddly toys and the chosen item was used to identify their group e.g. the Lizards, the Kittens. If the groups were going to be together for longer, it would have been better to ask the groups to choose their own group name which has been shown by research to give a stronger group identity (Zander et al, 1960 cited in Brown, 1999, p.30) but in such a short session this would not have been practical. The cuddly toys livened up the proceedings, though some people seemed rather distracted by them; the group with the lizard in particular seemed more interested initially in stroking it than engaging with their problem. However the use of malleable toys like rubber stress toys or snow globes has been shown to relax participants (Elwyn et al, 2001, p.110). If resources allowed, it might be interesting to try providing identical toys for all the group members as only one group member was able to play with a particular group's toy at a time.

However it seemed to engage the participants far more successfully than calling the groups A, B, C etc. and participants knew which group they were in straight away. Research shows that as well as asking groups to come up with their own name, emphasising similarity between group members and seating group members close together also increases group cohesion (Zander et al, 1960 cited in Brown, 1999, p.30). In retrospect the groups could have been put in place earlier in the session and made use of throughout for a wider variety of exercises.

Overall this exercise gave participants the opportunity to consider a real live problem, apply the knowledge gained from the demonstration and to gain confidence in using the tools needed to fix the problem. They were also more relaxed, more vocal and had started to bond with the other members of their group.

To quote an anonymous feedback comment from the latest StudyNet for Administrators course: "This is a good course for Admin staff and I hope that it is run more frequently for new users and others like myself who have acquired knowledge through colleagues."

Expanding the use of group work to provide a safer, more stimulating environment

After the positive experience trying a problem based group work approach in the 'StudyNet for Administrators' session mentioned above, it was decided to try a similar approach in a different session aimed at academic staff and other content providers on StudyNet. The session's overall learning objective is that the staff should be able to put content onto a module website. The two trainers involved prepared a number of practical exercises, some to be carried out in groups and others individually.

It was hoped that the group work exercises would fulfil a particular role. In the past there has been a low level of participant interaction on this session which is 3 hours long with a 20 minute break about half way through. Participants rarely talked together in the break, usually sitting separately or staying at their computer to read email. In the session participants seemed reluctant to ask questions either of me or of each other. This

atmosphere could be expected to lead to less learning taking place as learning is generally considered to have a strong social component (Wenger, 1991). So my aim was to promote learning by creating a simple, short term learning community where participants felt safe to ask questions of the facilitators and each other.

The session started with two group exercises. There did appear to be some reluctance among participants to get into groups. Again cuddly toys were used to identify groups which did seem to help overcome the initial reluctance. The group membership was decided in advance which may explain some of the initial resistance as people may have been shy. However if people had chosen their own groups, they might not have had the opportunity to meet new people and the groups would have been less diverse.

The first exercise was a simple ice-breaker. For such a short term group both research and common sense suggests a simple exercise to be appropriate, which the participants would easily understand and which would not take up too much time (Elwyn et al, 2001, pp.105-109). The participants told each other their names and something interesting about their name. Two groups then got together to introduce their fellow group members to the other members of the other group. Participants appeared far more relaxed after the exercise so it seemed to be successful.

The second exercise was to post some module news. In previous sessions that exercise had been carried out individually but this time it was carried out in groups. The exercise was achieved more quickly, with less facilitator input than it would have been as an individual exercise. Very realistic messages were posted suggesting participants were imagining scenarios which had happened to them in the past. It seems likely participants will remember how to post news after engaging imaginatively with the exercise and it was felt the exercise was a success.

Posting a news article



There had not been time to consider making the next exercise a group exercise and the participants did appear disappointed to leave their groups and work alone, so perhaps in future more of the exercises should be in groups. However it is important for participants to be able to work independently so it is appropriate to have some individual tasks.

Brown (1999, p48) states that "successful cooperation on a joint task increases cohesion". It was noticeable that in the break the participants went off in groups together and could be seen chatting happily together. The only downside was that they came back 5 minutes later than they should have done but hopefully this was because they'd enjoyed talking together and found it useful.

A positive anonymous feedback comment left after the course was "Although I have been using StudyNet for several months, I did not know all its functions/features. I have found this training very useful - I will definitely use what I have learnt to make my StudyNet pages look smart - hopefully this will draw my students' attention a bit more... Thank you!"

Is anyone learning anything?

An important worry mentioned at the start of this paper is a lack of certainty about whether the course participants are learning anything. There is no formal summative assessment for any of the sessions discussed. There is a generic StudyNet feedback form made available to participants, the results of which generally indicate participants are reasonably happy with our courses. However the key question is whether participants go away with the knowledge to effectively use StudyNet. Asking in the session if participants understand, if there are any questions or if it's alright to move on to another topic never seems to get much reaction. It is generally thought that learners will either not know they do not understand without being tested in some way or feel reluctant to show they have not understood (Fisher & Frey, 2007, p1).

Assessment is generally held to drive learning. In the most recent session, the participants were presented with a very quick StudyNet quiz. Unfortunately there was not time to add in feedback to the quiz and another mistake was to run it at the end of the session. Essentially the quiz was a summative assessment as it only really showed the state of play at the end of the session, with no opportunities for participants to learn from the quiz. However it did show that some ideas that seemed to have been well understood when presented, clearly had not been understood by a significant number of participants.

This would be an interesting area to develop for future sessions with several short quizzes at key points during the session providing useful feedback for the students. If a question caused particular problems, it could be used as a prompt to revisit the relevant topic before continuing to further material. The quizzes would also allow participants the opportunity to reflect on the materials.

Conclusion

The incorporation of a variety of different teaching methods has made the sessions very much more interesting to teach. The classes have been very much more interactive and participants appear to have enjoyed the wider range of activities as well as the opportunities to interact with each other. The material covered and the teaching methods are better aligned with both the participant's and the University's needs, enabling participants to take away new skills and knowledge to better enable them to carry out their role. There is room to take this further by incorporating more group work exercises and by including more quizzes, so the participants can gain confidence in their skills and the teacher can be sure that key points are being understood.

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