



Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

BMSW4003: DIGITAL SKILLS AND RESEARCH METHODS

Assessment: In Module: Research Report
Weight: 50% of total module assessment

Module Lecturer: Balendran Kandasamy

Student's Name & ID: Elvira Blagoeva / 1817901

Deadline: 08 – May - 2020

Table of Contents

1. Rationale.....	3
2. Objectives.....	3
3. Methodology & Primary Data Research.....	4
4. Secondary Data Research and Analysis.....	5
4.1 General Positive Effect Of VLE	5
4.2 Negative Effect Of VLE.....	6
5. Conclusion & Recommendations:	7
6. References.....	9

1. Rationale

With the constant growth of online activities and information spread there is now a huge awareness of how computers, tablets, phones and other devices can benefit and improve educational process and encourage the use of online learning in the classrooms (Rahmany & Chegini, 2014). In principle, a well-structured and maintained VLE should allow its users to receive the best possible education, in such a way that they might not in a normal lecture-based environment (Weller, 2007). If for some reason the material that is uploaded online does not meet the student criteria - both in terms of format and content (audio material, text files, and video presentations) the VLE would be considered impractical as it will not match the user's expectations and experiences. In best case scenario, it should have just enough material to enable students to catch up from their lectures and if desired, to expand their understanding of the subject that they are studying.

2. Objectives

Virtual Learning Environments (VLE) are online platforms, which are very common nowadays and are used to help deliver teaching materials and increase communication (JISC, 2009). They are mostly used in the education sector but also, many businesses started introducing this tool as a support for their employees. The report is exploring the impact of using the University Of Wales Trinity Saint David VLE (Moodle) on learning and is built around three main questions which investigate: whether students think that using VLE has positive impact on their studies; whether the use of VLE helps promoting independent learning and improves students understanding on the material and finally, if this type of learning motivates the people to study and gain new skills.

3. Methodology & Primary Data Research

The primary data research consists of a questionnaire which was handed to and filled by students who are attending the Digital Skills and Research Methods module. As a surveyor, a responsibility of mine was to choose the right way of asking the exact information. The questionnaire itself included close-ended questions where students had to choose one answer, either 'Yes' or 'No'. This helped when trying to find accurate and concrete information and it was also a key method in segmenting the bits of information (Reja, U., et al., 2003). Open-ended questions were included because of their role of predisposition the respondents to give more detailed and meaningful answers (Geer, J.G., 1988). Those type of questions were implemented in order to gather some actionable and straightforward feedback on the experience of the students while using VLE. The rating questions were the key way to measure the opinions of the respondents (Klausch, T., Hox, J.J. and Schouten, B., 2013). When researching the VLE the majority of students were aware of how the platform works and knew how to navigate around Moodle. Based on their answers, a conclusion was drawn that Moodle is used extensively amongst students. The aggregated data leads to the conclusion that the platform is useful and it is used as a mediator between students and teachers. Furthermore, when choosing the reason why they find the platform useful, they state that thanks to Moodle they can submit an assignment or catch up on a missed lecture's material remotely. This makes their student experience simpler, easier and at the same time the whole educational process turns out to be more flexible. When students are able to work at their own pace, place and time, this itself prompts independent studying and also leads to more efficient work and successful outcomes (Georgiadou, E. and Siakas, K.V., 2006). Moreover, students' responses on how does the virtual learning environment impact their studies, they state that this platform gives them the flexibility and opportunity to balance their tasks and way of learning. The findings based on a question which asks the respondents to choose the way they will handle the problem of lack of information or misunderstanding the definition of a task, lead to the deduction that Moodle is their first point of contact when seeking for detailed instructions regarding an assignment. Another advantage of VLE based on the findings of the questionnaire was that when seeking for more information or additional

literature, students find it more time-efficient to rely on Moodle's uploaded materials from their lecturers. Another preferred benefit of VLE is the ability to watch educating videos which make students' experience more interactive and enjoyable. The value of interactive approach and especially the involvement of video learning enhances the learning performance and has a positive impact on the student experience, but also stimulates students' curiosity and motivates them to learn more (Zhang, D., et al., 2006).

In terms of the structure of the virtual learning platform, the research findings indicate that most of the students like how their modules are arranged in the Dashboard. However, they state that the structure of the page within the specific module is not that clear. Almost 90% of the students who filled out the questionnaire mention as a reason a large number of links and the amount of information that leads to confusion and mistakes amongst them. According to Jacob Feldman (2003), the ability of people to learn depends to a large extent on the difficulty of the concept, which leads to the fact that the more complex something is, the more difficult it is for people to learn from it.

4. Secondary Data Research and Analysis

Literature Review on Virtual Learning Environment

This literature review focuses on the general positive and the negative effects of the VLE. Also it examines the effects that the VLE has on motivation and learning. Each of the sections is connected with the three main questions and provides further findings.

4.1 General Positive Effect of VLE

Positive impacts of the use of VLEs on student learning are supported by a study undertaken by Diochon and Cameron (2001) who implemented a project involving undergraduate students from University of California who used only the study materials available on the VLE. The study found that these people helped each other broaden their skills and knowledge and were more co-operative with their peers than in a normal study environment. What is more, the VLE encouraged progressive thought, increase their desire to

study, their self-confidence and time management skills (Diochon & Cameron, 2001).

In his publication in 2009, *Virtual learning environments: an evaluation of their development in a sample of educational settings (2009)*, Ofsted has done an investigation and visited more than 60 providers of VLE including: colleges, primary and secondary schools. This was initiated as a result of the UK Government strategy papers in 2005. Together with all the inspecting teams that Ofsted used, it was found out that the use of VLE was fairly new. The study shows that the colleges were the one that were making the most use of VLE as the participants there were more computer literate and knew how to operate through the platform whilst the primary schools were the one that used it the least because of the fairly young users. Also, the publication indicates that at its best the VLE is increasing the learning activity via the prospect of students being able to catch up on the material they missed or could not clearly understand during class. The success of the online platform came from the fact that it increased the desire of the students toward the teaching material and the use of technology. As a result of the investigation, Ofsted recommends the implementation of VLE as a tool of enhancing the learning process but adds that it should not be used to store files or any communications because it will confuse the users with the potentiality of losing them.

4.2 Negative Effect of VLE

A comparison was conducted by JISC (2007) for the '*In Their Own Words*' publication examining the learning experience. Two classes were asked to choose one of the teaching methods, either the classic in-classroom method or the VLE method. The study suggested that there was not any substantial difference between both methods but, the students who chose to try the VLE stated that they were not satisfied that much with learning outcome. The reason behind that was the fact that in a normal classroom environment a student can ask a question straight away for something that has not been understood, while with the other method they either have to look it up after the session or write it down and ask in class later (if they do not forget to do so) Klotz (2002).

In a study by Morrice & Deamian (2012) students from universities around the UK were asked to complete an online survey and write a feedback on their experience so far with the VLE they are using and what can be improved (if anything) to prompt the use of it. The result showed that the majority of the students who did the survey found the VLE as a useful tool. However, there were a lot of complains and some of the students outlined the following problems:

- When the Internet connection was slow (or even completely out) they could not download the resources they needed and what is more, at times they could not upload their assessments promptly, due to the high number of online traffic and as a result they were punished by being taken points from their assessments.
- Students who have bad studying habits tend to fall behind with the material and then find it hard to catch up with the work. Furthermore, it was stated that during the VLE study it is often the case that students have a lot of questions to ask and a lot of the material is new and not understood properly. Thus, they cannot interact with their lecturers and tend to demotivate as they are expected the next time they attend their lectures to be aware of the content that has been shared.
- Another important drawback that was shared was that students miss the group works and the opportunity to share ideas. According to the students, being able to cooperate in groups and share ideas helps to broaden the knowledge and eliminates the stress as otherwise all the workload is left for every individual to cope with and the struggle is enormous.

5. Conclusion and Recommendations

By analysing the primary and secondary data and evaluating the advantages and the disadvantages of the VLE type of study, it can be stated that the Virtual Learning Environment (and more specific Moodle) is an important part of the learning process for the students studying at University of Wales Trinity Saint David. Furthermore, the following points can be drawn as a conclusion

- VLE allows students to have control over learning – Participants are able to choose the tasks and activities they want to participate in, which gives them the accountability for what they are learning.
- The platform allows students to access their study material online and submit their assignments without having to go to the university and post it themselves like it used to before. It saves them time and helps them be more efficient
- It not only contains reading materials but also students can find videos, presentations as well as guides to help them use the different programs such as: PowerPoint, Word, Excel and etc.
- Communication – It enables students and teachers to communicate with each other through different ways such as: forums, chats and places where they can leave feedbacks.
- Fun – Crook (2000) suggests that by communicating and working with people, in the right conditions is motivating and entertaining.

Although there are more advantages that can be concluded from this report, there are also some points which show the disadvantages of this innovation.

- Online platforms need to be updated regularly and should contain only necessary and relevant information for the modules.
- The structure of the online platforms should be made well enough for its users to operate and navigate through it.
- Solo Learning – If you need any assistance on the topic or have a question, you cannot get immediate help as it is not certain if an online teacher will be available at that time. People can still ask in their virtual platforms but the answers they seek might be delayed due to online availability.
- Impersonal – Because there are no people apart from the student itself the environment might feel a little bit lonely and sometimes off-putting.

6.References

1. Crook, C. K. (2000) Motivation and the ecology of collaborative learning. Rethinking collaborative learning, London, Free Association, 161-178.
2. Diochon, M. C. & Cameron, F. (2001). Technology-based interactive learning. *Active Learning in Higher Education*, 2(2), 114-127.
3. Feldman, J., (2003). The simplicity principle in human concept learning. *Current directions in psychological science*, 12(6), pp.227-232.
4. Geer, J.G., (1988). What do open-ended questions measure? *Public Opinion Quarterly*, 52(3), pp.365-367.
5. Georgiadou, E. and Siakas, K.V., (2006). Distance learning: technologies; enabling learning at own place, own pace, own time. In *Learning and Teaching Issues in Software Quality, Proceedings of the 11th International Conference on Software Process Improvement-Research into Education and Training, (INSPIRE 2006), April, Southampton, UK* (pp. 29-40).
6. JISC (2009b) Effective Use of VLEs. Available online at: www.jiscinfonet.ac.uk (accessed 3 May 2020).
7. Klausch, T., Hox, J.J. and Schouten, B., (2013). Measurement effects of survey mode on the equivalence of attitudinal rating scale questions. *Sociological Methods & Research*, 42(3), pp. 227-263.
8. Morrice, J. & Deaminan, F. (2012) *Harnessing Technology Survey 2011/2012: Adult and Community Learning* (Coventry, Becta).
9. Rahmani, R., and Chegini S., (2014) Design of virtual learning environments for deep learning. *Journal of Interactive Learning Research*, 18 (1), 55-64. [Google Scholar]
10. Reja, U., et al., (2003). Open-ended vs. close-ended questions in web questionnaires. *Developments in applied statistics*, 19(1), pp.159-177.
11. Weller M. (2007) *Virtual learning environments: using, choosing and developing your VLE*. Abingdon: Routledge.

12. Zhang, D., *et al.*, (2006). Instructional video in e-learning: Assessing the impact of interactive video on learning effectiveness. *Information & management*, 43(1), pp.15-27.