

University of Wales

Trinity Saint David

The Impact of Virtual Learning Environment (VLE, as an example Moodle of our University) on the learning experience of the students at the UWSTD London Campus

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Abstract

This report assesses the impact of Virtual learning Environment (VLE) on the learning experience of students at the University of Wales, Trinity Saint David (UWSTD) London. This study is mainly quantitative as it involves data obtained from literature research and from empirical research using questionnaires which shows that VLE positively impacted on their learning experience.

Table of Contents

Abstract	
1.Introduction	4
2. Rationale	4
3. Research Objective	4
4. Literature Review	4
5. Research Methodology	5
5.1 Research method and the methodology	5
5.2 Qualitative and Quantitative Research	5
5.3 Primary and Secondary Data	6
5.4 Data Collection Process	6
5.5 Population Sample and Sample Size	7
5.6 Ethic in Data Collection	7
6. Results/Findings and Analysis	7
6.1 Primary Data Analysis	7
6.2 Secondary Data Analysis	12
6.3 Summary of the Findings	12
7. Conclusion and Recommendation	12
8. References	13
9. Appendices	15
9.1 Appendix I (Questionnaire)	15
9.2 Appendix II (Excel Result Table)	16

1. Introduction

Virtual learning environment in an educational setting appears not be a new phenomenon. Schools and universities implement them in their environment to enhance the learning experience of their students. This research uses data collected with the aid of questionnaires from a set of students and from existing literatures on the subject to assess the impact of VLE on the students at UWSTD London Campus.

2. Rationale

The reason for this research is to determine the impact of Virtual Learning Environment (VLE) on the learning experience of the students at the UWSTD London Campus.

3. Research Objective

The objectives of this research are:

- To determine whether Moodle has positively impacted on the students' learning experience.
- How the university can improve the Moodle platform to enhance the student's learning experience.

4. Literature Review

An early study that shows the positive impact of VLE was conducted in West Virginia, USA on some elementary students. The study used a software that enabled collaboration with teachers and students to develop their analytical skills. It was discovered that students who used the software performed significantly well in their standardized test in reading, language, and vocabulary than students who did not use it. The studies discovered that the tool maximized student's reflections, promoted independent thinking, and encouraged progressive thoughts (Scardamalia et al 1989)

In another study conducted on some undergraduate business student, the study experimented using learning materials that could only be accessed by Virtual Learning Environment (VLE). Their findings revealed that using VLE enhanced the student's enthusiasm, and capacity (Diochon & Cameron, 2001).

Although studies on the positive impact of VLE on student's learning experience appears to be higher, the findings from contradictory studies appears to be compelling (Quality Assurance Agency, Scotland 2007). One of such is that the way and manner VLE is operated. It was asserted that students in such an environment may lack the opportunity to engage in a structured dialogue and have a sense of belonging as they should have had in a traditional on-site classroom environment (Robertson and Klotz, 2002). Furthermore, those some studies that found that VLE such as web-based applications negatively impacted on student's learning experience by restricting their ability to effectively express their social and emotional views as they would have been able to achieve in a traditional classroom setting (Barker and Gossman, 2013)

My research is related to the literatures but unique because it is targeted towards a set of students at the UWSTD London campus and then seeks to assess the impact of Moodle on their learning experience.

5. Research Methodology

5.1 Research Method and Methodology

The research employs a quantitative research methodology to determine the impact of Moodle on the students learning experience. It collects data from both primary sources and secondary sources. It uses finding from questionnaires distributed to students at the university and literatures that have written on similar topics. The findings in the research are then to be analysed with the use of an excel sheet and are represented in a graph.

5.2 Qualitative, Quantitative and Combined Approach

Quantitative research involves data collected from number and statistics. Qualitative approach makes use of words, opinions, thoughts, feelings, and behaviours. While the combined approach involves the collection of both quantitative and qualitative data and analysing both together to arrive at an answer (Kothari, 2004). This research makes use of quantitative approach to collect data from 16 students through the means of a questionnaire. It conducts an analysis on them to arrive at the answer to the question on how VLE impacts on the learning experience of the students.

5.3 Data, Primary and Secondary Data

Primary data is data collected from the first-hand method which is original i.e surveys, questionnaires, interviews, and experiments. Secondary data is data collected from published website, newspaper, and magazines. (Bell, 2005).

5.4 Data Collection Process

Data collection is the process employed in preparing and collecting data. It may be referred to as the systematic gathering of data for a particular purpose for various sources that has been observed, recorded, and organized. The essence of this process may differ depending on the objective of the research (Kothari, 2004). This may be to obtain information; to keep record; to make decision; or to pass information to others.

This research employed both primary and secondary data collection methods in answering the research question. This research uses a questionnaire approach because it would help to give an accurate position of the students' experience of Moodle since they were the main users of the platform.

The total number of respondents that participated in the questionnaire process were 16. All of them were students of the digital and research skills module. I was able to collect data about the impact of the VLE on their studies, and in particular the usage of the Moodle platform. I structured the questions in such a way that it will first determine whether students were familiar with the virtual learning environment in the London campus. Then, I had to determine how often the students made use of Moodle to determine the frequency of use. The questionnaire also contained questions about the any difficulty that may be experienced in the process.

In addition to this, a direct and open-ended question was asked to know how Moodle is impacting on the student's studies in the London campus. In connection to this question and the first research objective, the questionnaire gave students the option to choose between whether they preferred face to face learning or remote learning.

Finally on the primary data collection process, I wanted to know the overall experience of the student in using the Moodle platform and whether they would recommend the platform to other students in the university campus.

Data from secondary sources was also collected and consulted primarily as a guide. The work consulted articles and information published online, journals and conference materials which constituted of existing data already collated and analysed by other researchers. Most of them

can be found in the literature review. They addressed issues such as the positive and negative impacts of VLE of the students learning experience using different research methodology and data collection process. The data was checked to ensure its accuracy through repeated search and judging from the number of researchers that have cited and used the article. This was necessary to avoid inaccurate and misleading information

5.5 Population, Sample and Sample Size

The target respondents for the research were students at the University of Wales, Trinity Saint David (UWSTD) London campus. These students were those offering the Digital Skills and Research (BMSK 4003) module. 16 students took part in the questionnaire. All the students that participated in the process responded to all the questions contained in the questionnaire.

5.6 Ethics in Data Collection

There were no ethical issues in the process of data collection. The process involved anonymised questionnaires which did not reflect the student's name or any other sensitive details. All the participants were informed of the reason of the questionnaire and the objective of the research. I also informed my lecturer and the university. I ensured that all the data was collected according to the law and were kept safe by me. Lastly, all the secondary data consulted by me were duly referenced.

6. Result, Findings and Discussion

6.1 Primary Data Analysis

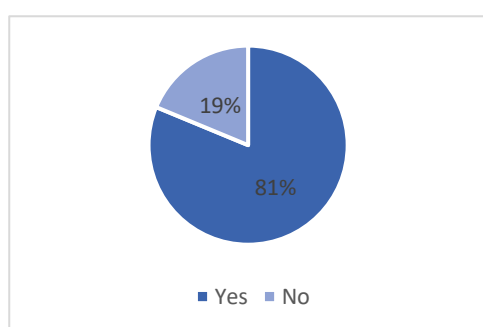


Figure 1: Familiarity of students with VLE

Yes	13 (81%)
No	3 (19%)

Table 1: Familiarity of students with VLE.

Figure 1 and Table 1 represents the number of students who are familiar with virtual learning environment.

The result from the questionnaire shows that 13 out of 16 students were familiar with what a VLE is. This represents 81 % of the students that took part in the questionnaire. On the other hand, only 3 students which represents 19% noted that they had no idea of a VLE.

Based on the forgoing analysis, I can conclude that most of the students in the questionnaire have knowledge of a VLE.

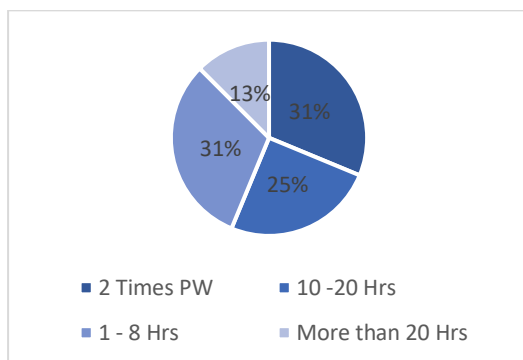


Figure 2: Frequency of usage with VLE

2 times per week	10 -20 hrs	1 -8hrs	More than 20hrs
5 (31%)	4 (25%)	5 (31%)	2 (13%)

Table 1: Familiarity of students with VLE.

Figure 2 and Table 2 shows the how frequent the students that participated in the questionnaire used Moodle.

The result shows that 31% of the students accessed Moodle twice a week. This result is the same with the percentage of students that spent within 1 to 8 hours a day on platform. The result also shows that students that spent 10 -20 hours on the Moodle were 25% of the respondents while only 13 % spent more 20 hours on the platform.

From the result, I can conclude that less students spent more time on Moodle while most of the students spent less time on the platform.

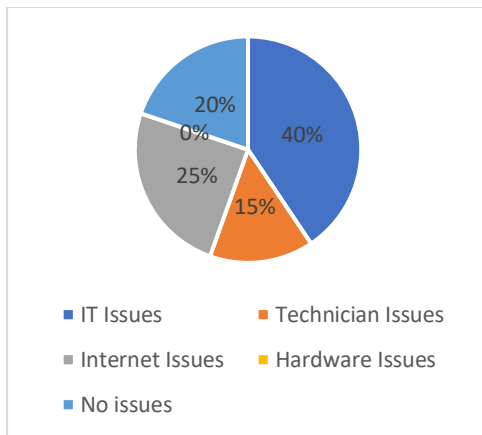


Figure 3: Difficulties in accessing Moodle

IT Issues	Technician Issues	Internet Issues	Hardware Issues	No Issues
4 (20%)	3 (15%)	5 (40%)	0 (0%)	4 (25%)

Table 3: Difficulties in accessing Moodle

Table 3 and Figure 3 represents the list of difficulties that students may likely encounter when using Moodle.

The results shows that Internet issues topped the chart with 40%. However, IT related issues ranked the same with number of students that indicated that they experienced no issues using the platform. Only 15% percent of the students experienced technician issues, while no student indicated that they had hardware issues.

Findings from this analysis shows that Internet related issues appears to pose difficulties to more students using the platform.

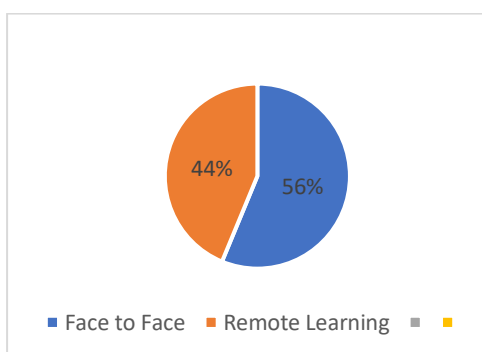


Figure 4: Preferred Learning Method

Face to face Learning	Remote Learning
9 (56%)	7 (44%)

Table 4: Preferred Learning Method

Figure 4 and table 4 shows the preferred learning method of students at the London Campus of UWTSD.

The result shows that 56 % of the students preferred face to face learning while 44% preferred remote learning.

Based on the analysis, more students prefer face-to-face learning to remote learning. Although, there is a difference in the numbers, the students' result on their learning preference was very close and almost divided equally.

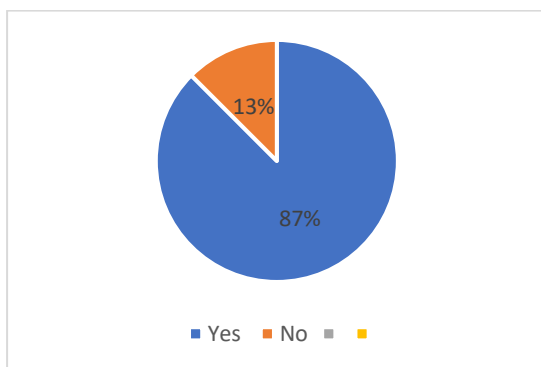


Figure 5: Recommend Moodle to other students

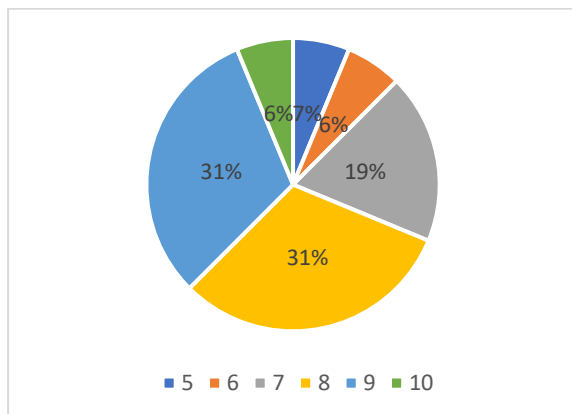
Yes	No
14 (87%)	2 (13%)

Table 5: Recommend Moodle to other students

Figure 5 and Table 5 shows the result for the number of students that would recommend Moodle to other students of the London Campus.

The results shows that 87% of the students which represented the majority were more likely to recommend the platform to other students while only 13% declined to recommend the platform to other students.

Based on the analysis, more students would recommend the platform to other students of the London campus.



Not useful - Extremely useful

Figure 6: Student's experience of Moodle

Not Useful

Extremely Useful

1	2	3	4	5	6	7	8	9	10
				1(6%)	1(7%)	3 (19%)	5 (31%)	5 (31%)	1(6%)

Table 6: Student's experience of Moodle

This table indicates the rating of students experience of Moodle.

The result shows that most of students found the platform useful. 31% of the students in columns 8 and 9 were the highest while 1 student each in column 5, 6 and 10 showed that they also found the platform useful.

Lastly, on the question 4 which is an open-ended question, the students were asked: ***How is Moodle platform impacting your studies in London Campus?*** The students responded by stating that they were satisfied using Moodle and that it gave them the motivation to study. Based on that result, the findings here is that Moodle made a positive impact on the students learning experience.

6.2 Secondary Data Analysis

Secondary data was obtained from literatures that conducted research on the impact of VLE on students learning experience. The result shows that there is no uniformity in the findings from the studies. While some research found overwhelming positive impact of VLE on student's experience, such as the ability of the student to exercise control over their learning, enhance communication and collaborative learning, increase the confidence of students' and their enthusiasm level among others, on the divide are conflicting studies that show a negative impact.

6.3 Summary of findings

Findings from the research shows that the students learning experience were positively impacted by Moodle as they were satisfied with using the platform and it gave them the motivation to study, even though most of them preferred face-to-face learning to remote learning.

7. Conclusion and Recommendation

In conclusion, the research has been able to show through primary and secondary data that the students learning experience were positively impacted using Moodle, as they even noted that they recommend it to other students.

It is recommended that the university should introduce more VLE platform to enhance the student's learning experience since they indicated that they preferred face to face learning. to on-line learning.

Statement

I declare that this research was done by me and I have been honest in the data collection process. I took permission from all the participants, the University, and my lecturer. All the data was collected and kept safe in accordance with the General Data Protection Regulation (GDPR)

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9.0 Appendices

Appendix 9.1

Questionnaire Design

Student Name: EWELINA HALINA SERDYNSKA

Student ID: 1922217

Module Name: Digital Skills and Research Methods Term 1 Group: 8

Aim: This exercise is aimed to help you in your questionnaire design. Please note, you need to use this questionnaire to conduct a survey which is also one of the important parts of your research report.

Please write down your questions that you are going to use in your primary data collection. Try to have different types of questions such as open ended question, close-ended question (YES/NO), multiple choice question, Likert-scale question.

Question 1: Are you familiar with the virtual learning environment in London Campus?

Yes No

Question 2: How often do you use Moodle platform in London Campus?

- | | |
|-----------------------|-----------------------|
| a) two times per week | c) 1 -8 hours |
| b) 10 – 20 hours | d) more than 20 hours |

Question 3: Do you find difficulties accessing Moodle platform in London Campus?

If yes, please tick the right answer:

- | | |
|----------------------|------------------------|
| a) IT issues | c) Internet connection |
| b) Technician Issues | d) Hardware Issues |

Question 4: How Moodle platform is impacting your studies in London Campus?

Question 5: Which learning method do you prefer to use in London Campus?

- | | |
|-----------------|--------------------|
| a) Face to face | b) Remote learning |
|-----------------|--------------------|

Yes No

Not Useful Extremely Useful

[illegible]

RESULTS ON THE QUESTIONNAIRE ABOUT THE IMPACT OF VIRTUAL LEARNING ENVIRONMENT ON THE STUDENTS OF UWTSD LONDON

Questions	Answer	Result
Are you familiar with the virtual learning environment in London Campus	(a) Yes (b) No	= 13 = 3
How often do you use Moodle platform in London Campus	(a) 2 times per week (b) 10 -20 hrs (c) 1 -8hrs (d) More than 20hrs	= 5 = 4 = 5 = 2
Do you find difficulties accessing Moodle platform in London Campus? If yes, please tick the right answer.	(a) IT issues (b) Technician issues	= 4 = 3

	(c) Internet Issues (d) Hardware Issues (e) No issues	= 5 = 0 = 4
How is Moodle platform impacting your studies in London Campus?	Most of the students are satisfied in using Moodle and they said it gives them motivation to study	
Which learning method do you prefer in London Campus	(a) Face to face (b) Remote learning	= 9 = 7
Would you like to recommend Moodle platform to other students in London campus	(a) Yes (b) No	= 14 = 2
How would you rate your experience with Moodle at our London Campus	1. Not useful at all 2. 3. 4 5 6 7 8 9 10. Extremely useful	 = 1 = 1 = 3 = 5 = 5 = 1

