

The impact of Virtual Learning Environment on the students of UWTSD.

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Term 2 - Group 3



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1. Introduction

In this report, I will look at the impact of Virtual Learning Environment (VLE) on students learning at UWTSD (London Campus).

A VLE is a system designed to deliver learning materials to students using the Web. It makes use of both the internet and computers and allows students to view material while not on campus. The VLE used by UWTSD (University of Wales Trinity Saint David) is Moodle, which is an open source VLE, and allows free usage and can be altered by the university. (*Learn about Virtual Learning Environment/Course Management System content*, n.d.)

2. Rationale

The reason for conducting this research and formulating this report, is to discover what students experiences with VLEs, and Moodle specifically are, and to try and find out if there are any areas in which it could be improved, in order to increase student satisfaction, and hopefully make university life easier for all. It can also help to judge whether students prefer learning online, as they are currently due to COVID-19, or in person, in classes and face to face.

3. Research Objectives

Through my research, I am trying to achieve:

- An understanding of students' thoughts and experiences with VLE (Moodle) at UWTSD.
- Knowledge of where improvements could be made in Moodle.
- An insight into the advantages and disadvantages of VLEs

4. Literature Review

Bath University have an interesting online leaflet regarding VLEs. It outlines several advantages to them, as well as disadvantages. It shows that most of the positives come back to the idea that it is much easier to use a VLE. In the modern age, a majority of people, especially those of university age, have access to a computer and the internet, so it is very simple to delivery material online for the student, and for the lecturer as well. It also gives access for students who perhaps would not be able to get to campus, such as those with disabilities. There can however be drawbacks. These include the fact that if used incorrectly, a VLE can end up as a "Dumping ground" for material and information. As uploading to a VLE is so simple, often lecturers can be guilty of just uploading everything they can, which leads to an information overload, and students can find it hard to distinguish which information is most useful to them at the time. (O'Leary)

The International Journal of Interdisciplinary Educational Studies looks at how VLEs can be used in a broader sense by the education sector, to help improve attention and discipline in schools. They say that as motivation for schoolwork is a major problem in the 21st century, by creating a VLE which can be customised for a student's needs, you can garner much more interest and attention than would otherwise be had from more traditional means of teaching, such as textbooks. Their research showed that while it was a significant change in methodology on the part of the teacher, they saw remarkable results in the increase of student participation. The main takeaway from this paper is that it shows how VLEs can help tutors and lecturers to better communicate and engage with the students of today, in an ever modernising and technological age, as tastes and learning methods change. (Portela, Alonso and Pino-Juste, 2016)

FE News have an article written by Becki Lee, who is head of eLearning at Hopwood Hall College, which explains how VLEs are increasingly more important in an age where things are every changing, and information transfer needs to be fluid and easy to alter. She explains how teachers have historically be overburdened with administrative tasks and class prep, and how VLEs allow them much more time to speak one on one with students, especially as class sizes are growing. She also emphasises the points made above, in that in this modern age, young people are increasingly tech-savvy, and respond better to technology than to traditional means of learning, so using VLEs is a vital step forward in educating the youth of today. (Lee, 2019)

The royal college of Surgeons have found a fantastic use of VLEs, one which really shows a major advantage of them. They are using it as an open access resource for doctors and medical staff who need to learn more about Covid-19. Without the use of a VLE, this information would have to be sent individually to either a medical facility, and then distributed internally, or to the actual individual themselves, which could take weeks, months, or years. This shows that VLEs are incredibly useful, as not only are schools and universities making use of them for students, but also medical entities. (Goldring and Mitchell, n.d.)

These articals and papers all focus on how VLEs can be used, and the advantages and disadvantages of doing so, while my report will mainly focus on the impact VLEs have on students, and their personal experiences and opinions, as well as where areas of the UWTSD VLE, Moodle, can be improved.

5. Methodology

“Research methodology is about how a researcher systematically designs a study to ensure valid and reliable results that address the research aims and objectives.” (Jansen and Warren, 2020)

5.1 Research methods

My research included a questionnaire for my fellow students at UWTSD, containing **qualitative data questions**, which can be defined as descriptive as it can be observed but it cannot be measured and **quantitative data questions** which work with numbers and can be quantified. (McLeod, 2019)

The reason I chose to use a combined approach, is that it not only gives easy to correlate numerical data, but also provides some form of explanation as to why those answers were given. Overall, I felt that this approach would allow for a more detailed look at what students feel.

I also conducted research in the form of reading websites and research papers written by others, to get a better sense of what a VLE is, and how they are used outside of UWTSD.

5.2 Data

Data is information, primarily facts and numbers, which is gathered in order to be examined and used to aid decision making. It is usually collected in electronic form, so that it is easy to store and use on a computer. (*Data*, n.d.)

Primary Data is data that has been collected directly by the person conducting the research. This can include surveys, interviews, experiments, or observations. While it is often considered the most reliable source of data, it can be more expensive and time consuming. (Salkind, 2010)

Secondary Data is any data or findings which have been sourced from someone else’s research. It can take the form of papers, articles, websites, or books. It is often much easier and cheaper to obtain, as long as permissions are given and correct referencing is done, however as it is created by

someone else, it may not be specific to the what you are doing, so it's reliability may be short. (Allen, 2017)

5.3 Data collection process

For this report, I made use of both primary and secondary data.

For my **primary data**, I created a questionnaire containing questions designed to gauge my fellow students' opinions on Moodle and see where they feel improvements could be made. I then extrapolated that data into excel spreadsheets and created graphs to better show the results.

For the **secondary data**, I have read different sources to get a sense of how VLE is used outside of UWTSD for comparison.

5.4 Population, sample and sample size

Regarding this research, the population is all members of the specific group which is to be studied. (*Populations and Samples*, n.d.) For UWTSD London, this totals 2500 students.

The "Sample" is the group that has been chosen to study or conduct research with, from within the population of the overall study, and the sample size, is how many people or items are in that sample. It normally includes a representative selection of subjects that cover all aspects of said population. (*Sampling In Research*, 2006) For my research, I chose 15 people in my Digital Skills and Research Methods class, as I had most access to them.

5.5 Ethics in data collection

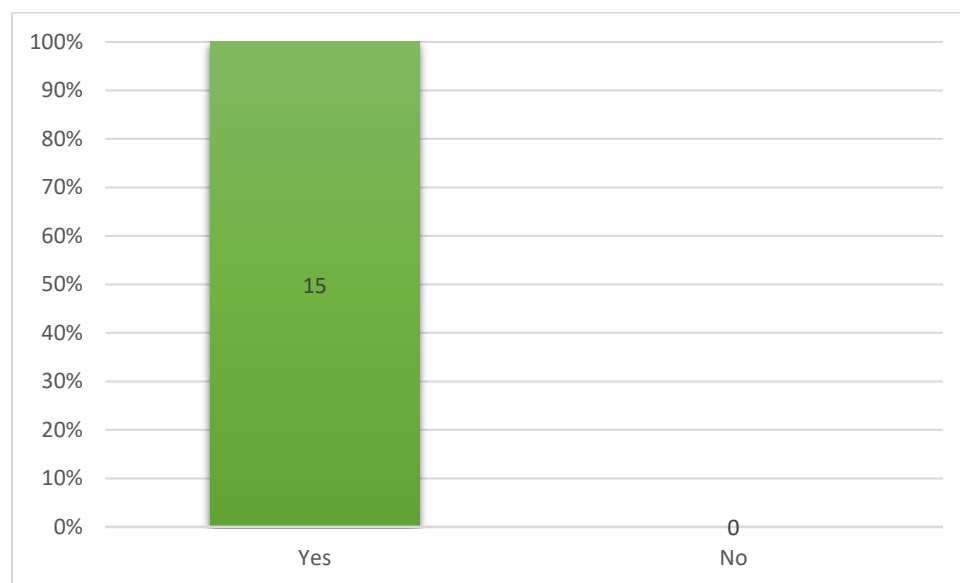
All the data collected in my research was done honestly, and without alteration. I did not pressure any subjects involved into giving specific answers, and all results are independent.

6. Findings, analysis and discussion

In this section, I will show the results of my questionnaire, presented to students at UWTSD, showing the raw data, and graphs.

6.1 Question 1

1. Are you familiar with the term " Virtual Learning Environment ?"	
YES	15
NO	0

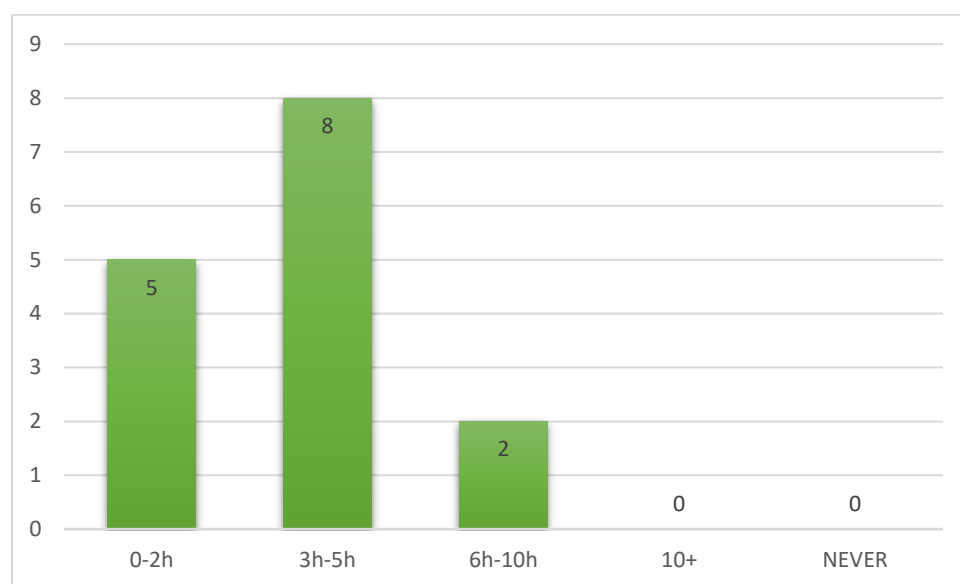


6.1.1 Analysis

This was a very basic question designed to simply gauge whether the people answering the survey were familiar with Moodle and VLEs in general. As you can see, 100% of students asked are aware of VLEs, which is of no surprise considering the current climate, and the need for the use of VLEs to distribute information while University is closed.

6.2 Question 2

2. On average, how much time do you spend weekly on Moodle?	
0-2h	5
3h-5h	8
6h-10h	2
10+	0
NEVER	0

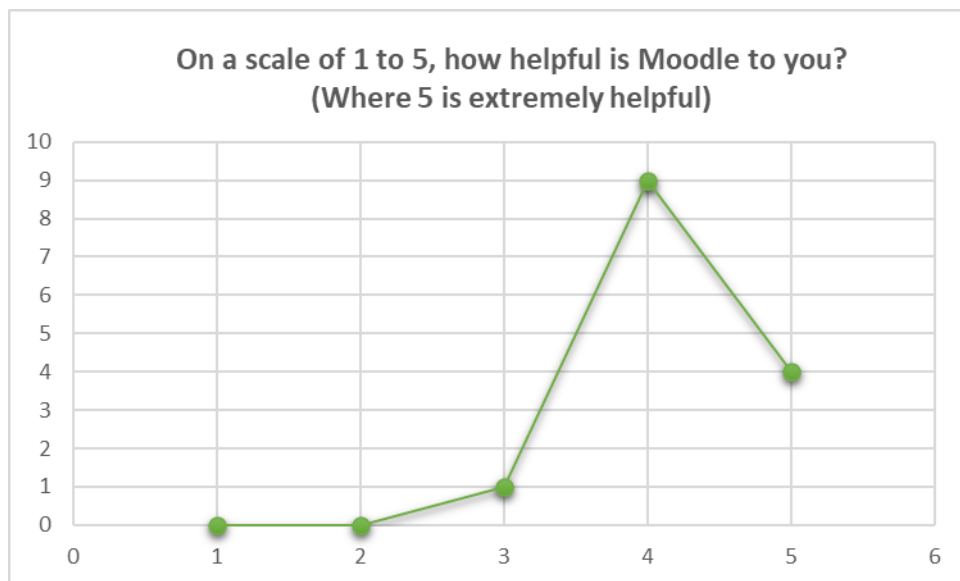


6.2.1 Analysis

53% of students use Moodle between 3-5 hours per week. This is almost half the amount of time they spend in lessons across all modules and double the amount they spend in this module alone. Considering Moodle is simply a place to receive class notes and information, this is a considerable amount of time, and shows that they make full use of the facilities. The fact that 33% students use Moodle <2 hours per week, shows that not every student is completely used to the idea of a VLE, or perhaps that they are busy outside of lesson time.

6.3 Question 3

3. On a scale of 1 to 5, how helpful is Moodle to you? (Where 5 is extremely helpful)	
1	0
2	0
3	1
4	9
5	4

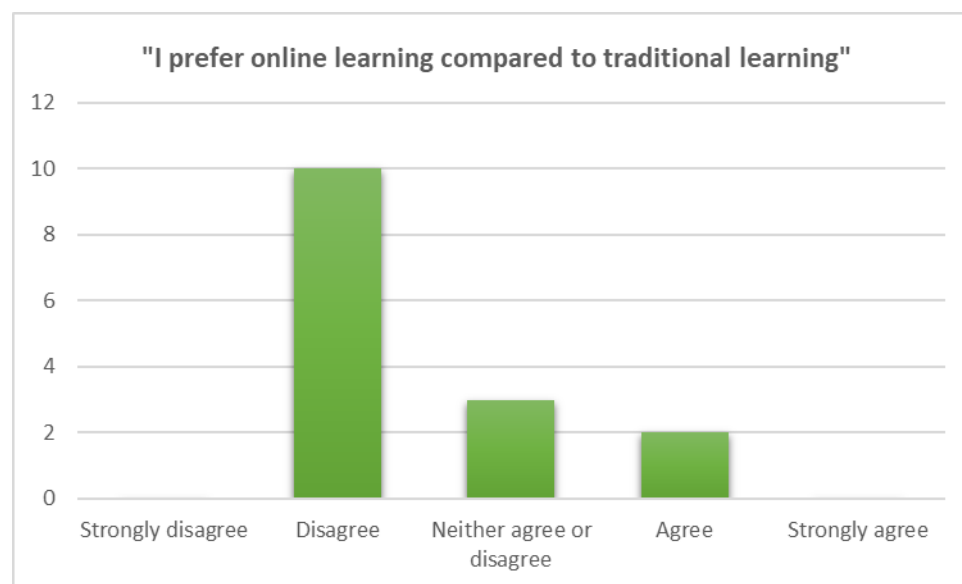


6.3.1 Analysis

The results from this question are particularly interesting in my opinion. It shows that most students find Moodle very helpful. While this could be because of the current Pandemic and lack of access to university grounds, it perhaps more backs up what was looked at in The International Journal of Interdisciplinary Educational Studies, where they state that modern day students are far more engaged by online formats than traditional textbooks. It also shows that VLEs are vastly important in modern day society.

6.4 Question 4

4. To what extent do you agree on the following sentence: "I prefer online learning compared to traditional learning"	
Strongly disagree	0
Disagree	10
Neither agree or disagree	3
Agree	2
Strongly agree	0

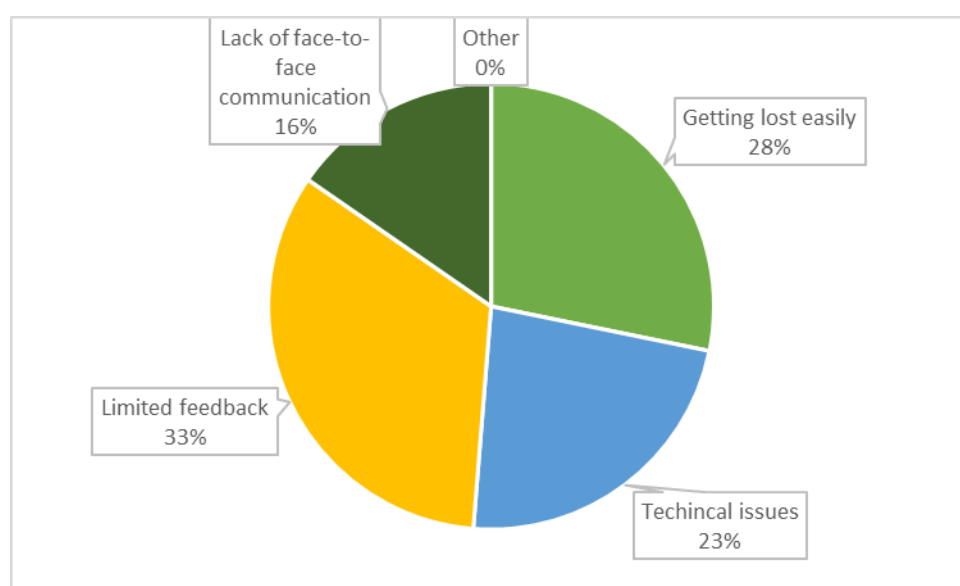


6.4.1 Analysis

This question goes completely against all the secondary research I examined, as well as the previous question. Here, 66% of students asked say they prefer traditional learning methods to online. Perhaps the sample I used is not conducive with students outside of UWTSD, or perhaps they got confused between VLE and conference call classes. In the next question, I will look at the reasons behind their response.

6.5 Question 5

5. From your point of view, which are the disadvantages about Virtual Learning? Please select all that apply :	
Getting lost easily	11
Technical issues	9
Limited feedback	13
Lack of face-to-face communication	6
Other (please specify):	N/A

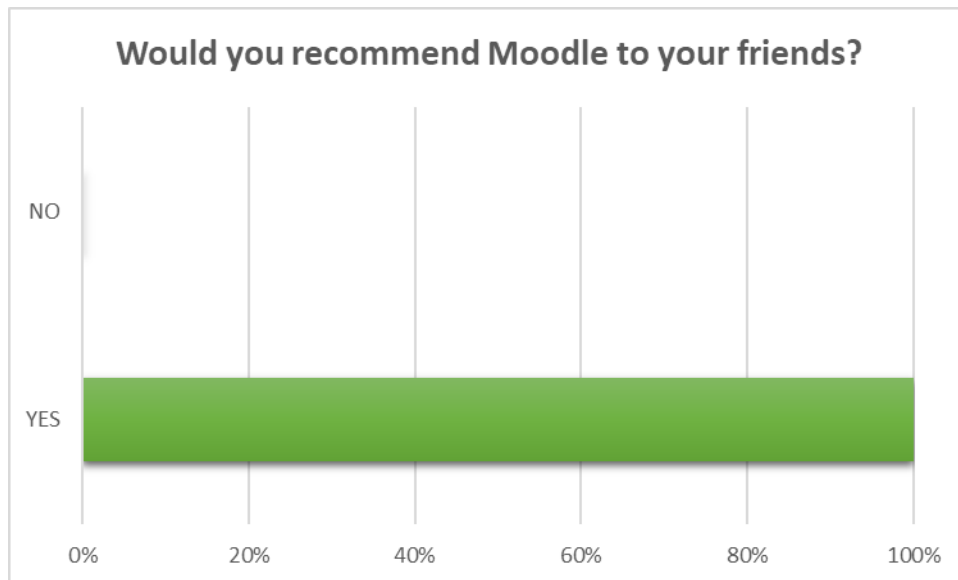


6.5.1 Analysis

From the graph above, you can see that students have an issue with Moodle for varied reasons. 28% find it confusing, which could mean that the layout is not easy to navigate, and it is easy to get lost in the different links. Technical issues are also a large factor (23%) in the students questioned not enjoying Moodle. This could be as a result of poor server support, or tech support, or perhaps that they do not possess the technical knowledge to make full use of the system. The most interesting aspect of this question, is that a combined 49% of students asked, feel as though the fact that they are so far separated from their lecturers, and have no face to face contact with them, as the biggest issue. This is completely understandable as it can be quite difficult to garner a response from someone over the internet, and a back and forth dialogue is always much easier in person.

6.6 Question 9

9. Would you recommend Moodle to your friends?	
YES	15
NO	0



6.6.1 Analysis

An incredible 100% of students would recommend Moodle to a friend. This shows that even when they have issues with the system, they understand its importance to modern education, and see how it can help people.

7. Conclusion

To conclude, VLEs are ever increasing in both importance and popularity. They have a major impact on lives in all areas of education and are providing much needed aid at a difficult time, where students are unable to actively attend classes. This I am sure will become more evident over time. Regarding the students of UWTSD and Moodle, there has been a mixed reaction. While students can see the usefulness of Moodle and understand why it is important not only to have available, but to make full use of, they have some reservations about it. Mainly, they are concerned about the lack of face-to-face and one-on-one feedback they can receive from lecturers, which is a very important part of studying, as without it, it is difficult to gauge how well you are progressing throughout the year.

Personally, I have found Moodle useful to no end. Having all class notes and literature accessibly in once place has been great, and I intend to continue its use going forward.

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Appendix

In-Class exercise: Questionnaire Design

Student Name: Noemi Baglieri Student ID: 1916148

Module Name: Digital Skills and Research Methods Term 2 Group: 3

Aims: This exercise is aimed to help you in questionnaire design for your assignment. **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 yes or no question, multiple choice question, Likert scale question and open-ended question.

Question 1:

Are you familiar with the term **Virtual Learning Environment?** (Moodle)

☐ Yes

☐ No

Question 2:

On an average, how much time do you spend **weekly** on Moodle?

☐ 0-2h

☐ 3h-5h

☐ 6h-10h

☐ 10+

☐ Never

Question 3:

On a scale from 1 to 5, how **helpful** is Moodle to you? (Where 5 is extremely helpful)

1	2	3	4	5
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Question 4:

To what extent do you agree on the following sentence: “I **prefer** online learning **compared to** traditional learning”

Strongly disagree
Disagree
Neither agree or disagree
Agree
Strongly agree

Question 5:

From your point of view, which are the disadvantages about Virtual Learning?
Please select all that apply:

- ☐ Getting lost more easily
- ☐ Technical issues
- ☐ Limited feedback
- ☐ Lack of face-to-face communication
- ☐ Other (please specify):

Question 6:

In a few words, please state what are the **benefits of Moodle** according to you:

Question 7:

Are there any other **useful features** that you would like to see on Moodle?

Question 8:

In your opinion, please tell us what we can do to **improve** Virtual Learning?

Question 9:

Would you recommend Moodle to your friends?

☐ Yes

☐ No

QUESTIONNAIRE RESULTS: IMPACT OF VIRTUAL LEARNING ENVIRONMENT ON THE STUDENTS OF UWTSd LONDON																			
Student: Noemi Baglieri - 1916148										SAMPLE SIZE: 15 STUDENTS									
										Group 3 - Term 2					Module: Digital Skills and Research Methods				
1. Are you familiar with the term "Virtual Learning Environment?"										5. From your point of view, which are the disadvantages about Virtual Learning? Please select all that apply :									
YES					15					Getting lost easily					11				
NO					0					Techincal issues					9				
										Limited feedback					13				
										Lack of face-to-face communication					6				
										Other (please specify):					N/A				
2. On average, how much time do you spend weekly on Moodle?										6. In a few words, please state what are the benefits of Moodle according to you:									
0-2h					5					All-in-one website with all material needed to study is the benefit that all students find most convenient									
3h-5h					8														
6h-10h					2														
10+					0														
NEVER					0														
3. On a scale of 1 to 5, how helpful is Moodle to you? (Where 5 is extremely helpful)										7. Are there any other useful features that you would like to see on Moodle?									
1					0					Most students think Moodle is already useful as it is and does not need any other features.									
2					0														
3					1														
4					9														
5					4														
4. To what extend do you agree on the following sentence: "I prefer online learning compared to traditional learning"										8. In your opinion, please tell us what we can do to improve Virtual Learning?									
Strongly disagree					0					Students request more time spent on one-to-one lessons to receive more feedback and build their confidence on the subjects studied. They also mention improving communication from lecturers is also required									
Disagree					10														
Neither agree or disagree					3														
Agree					2														
Strongly agree					0														