



BMSW4003 Digital Skills and Research Methods

Assignment Title: DSR Assessment 2

Individual Report

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Introduction

Technology and digitalisation have reached almost every aspect and became an integral part of human life. The same goes for education as well. The academic life or the period of educational learning is important for every person. That is why there are always attempts to make the platform, process, and curriculum of education more advanced and contemporary so that students receive the highest value from there (Weller, 2007). As a result, elements of technology and digitalisation are also used in this place, one of which is the Virtual Learning Environment (VLE) (Becnel, 2019). It is a web-based platform installed by educational institutions through which students pursue a digitalised education of their courses. Moodle is an example of VLE, which is free to download, and the students can enrol themselves to their respective universities and courses and can continue their education and learning almost similar to the traditional way of education, where the only major difference is no physical contact (Cingillioglu, 2014). VLE has been proved to be an essential part of education during the Covid-19 pandemic. However, no matter how useful this platform has proved itself for online learning, there are some disadvantages as well due to the lack of physical contact (Global, 2012). That is why research is going to be conducted to explore the effectiveness, experience and opinion of students currently studying through VLE.

Research Aim

This research is aimed at investigating the impact of Virtual Learning Environment (VLE)- Moodle on the learning experience of the students at the University of Wales Trinity Saint David London Campus.

Research Objectives

- To understand the effectiveness of VLE over the learning experience for the students of UWTSD London Campus.
- To explore the perception of the student of UWTSD London Campus over VLE.
- To identify any challenges faced by the students to access to learn on VLE.

Research Questions

- Does the student of UWTSD are well adapted to the VLE?
- Is the interaction level at VLE for a proper learning environment satisfactory?
- Are the students facing any issues while learning through VLE?
- Does VLE prove to be effective for the students and their learning?

Research Methodology

This part of the research is going to focus on what type of data is going to be collected and through which method so that further data analysis and output generation could be done (Bryman, 2014).

Research Methods

In the research method, it is decided that in which direction the data collection is going to happen and through what type of data (Deb et al., 2019). There are usually three types of research methods are available, quantitative, qualitative and mixed methods.

The quantitative method is where the researcher works with numerical data. Meaning represents measurable computational, mathematical, statistical data (Hegde, 2016). These data offer insights of a certain range or amount of the research insights through which a certain perception could be developed regarding the area of the study. On the other hand, qualitative data is where the researcher works with the data that are non-numerical and represents a detailed or theoretical understanding of the area of the study (Novikov and Novikov, 2013). It offers descriptive and detailed insights which give a general idea of the situation. Finally, in the mixed method, the researcher works with both qualitative and quantitative data to balance the whole research that offers both precise and detailed insights (Pruzan, 2018).

Here, the mixed method will be used because the researcher is willing to understand how many students benefit from VLE, who are facing challenges, etc., along with the overall situation and impact of VLE, which will require both quantitative and qualitative research.

Data collection

The data collection indicates the sources and tools of data that are going to be collected. It could be done through primary data collection. The researcher is the first person to collect data from the direct sources of the research that are not available anywhere else, such as through interviews, survey questionnaires, focus groups, etc., (Supino and Borer, 2012). Or it could be done through secondary data where the researcher collects data that are already available in different sources such as newspapers, books, articles, journals, internet websites, etc. It offers additional and detailed insights into the area of discussion (Kumar, 2014).

As for this research, both primary and secondary data collection tools will be used through the survey questionnaire and from various authentic and useful articles, journals, and books that offer an understanding of the VLE and its impacts, effectiveness, prospects, etc.

Sampling Strategy

The survey questionnaire is going to be developed for the students of the UWTSD London Campus. However, due to the pandemic situation and other limitations, it is not possible to collect data from all the students or the whole population of the campus. That is why a sample of 200 students will be selected based on the random sampling strategy. These students are the representatives of the whole population of UWTSD and will provide insights on how they are feeling about VLE and Moodle through which they are currently pursuing their studies.

Ethical Considerations

This research will be conducted by following all the ethics of research. No student will be pressured to respond to the survey and complete anonymity will be maintained (Bryman, 2014). Also, the secondary data will be collected only from authentic and reliable sources by focusing on data redundancy and other issues (Deb et al., 2019).

Literature Review (Secondary Research)

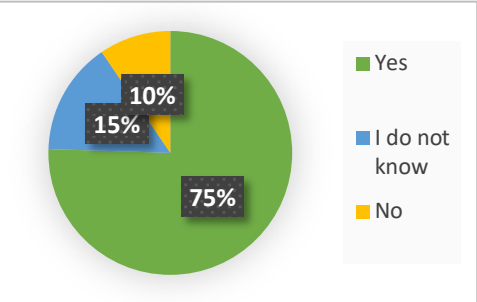
Virtual Learning Environment in education has proven to be a revolutionary approach worldwide. It has made access to education easier than ever. According to Thomas (2012), it is not offering all the parties related to education with many advantages such as learning and teaching from any corner of the world, opportunities of independent education, better organisation of the study program etc. VLE is also making students closer to technology, which is helping them to learn about the contemporary practice of education. Cingillioglu (2014) also agreed to the benefits of VLE by saying that it has made the sharing of resources in the area of education easier than ever. Now students and teachers can share anything and anything related to their studies without the trouble of reaching to everyone individually (Information Resources Management Association, 2012). VLE has also made it easier for students to pursue and complete their higher education while working in the professional field, as now they do not have to attend physically, but with the use of a technological device, they can work on both things (Becnel, 2019).

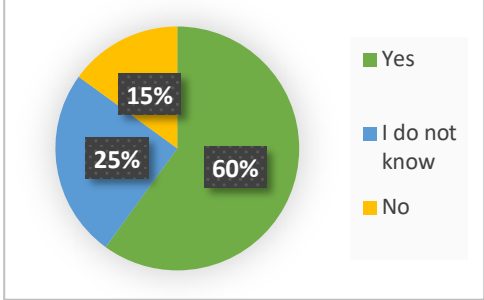
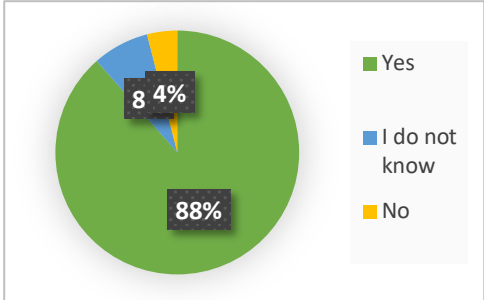
During this pandemic, VLE and its platforms such as Moodle, Blackboard has become a blessing for students around the world. Because VLE did not let the physical distance work as a hurdle over the flow of education and the students are now completing their undergrad, post-grad, PHD and other programs without any worries (Pakanen et al., 2020). According to Lara-Alecio et al. (2021), the biggest convenience VLE offers is flexibility. They agree that it does not offer similar interactive lessons as physical education, but the flexibility has solved the problems to a great extent. Because now, students of other countries do not have to worry

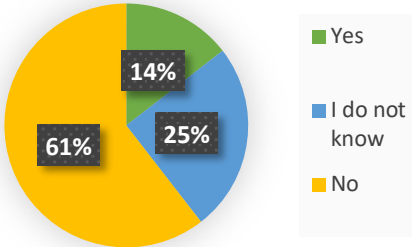
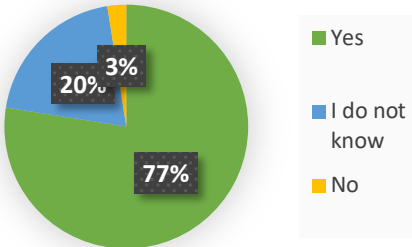
much about higher education in foreign universities because now, they can easily enrol themselves through VLE (Pakanen et al., 2020).

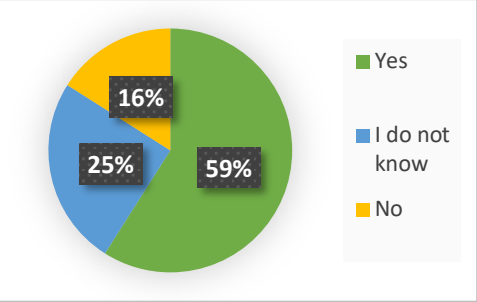
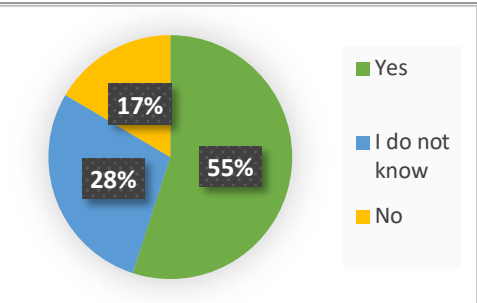
Data Findings and Analysis

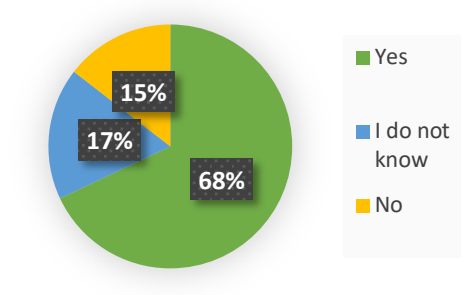
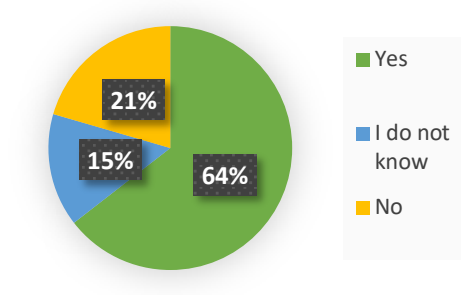
Based on the decided sample of 200 students of UWTSD, the survey questionnaire was provided to them, and the recorded responses are shown below.

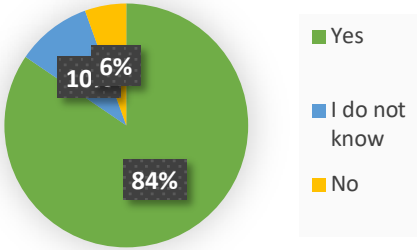
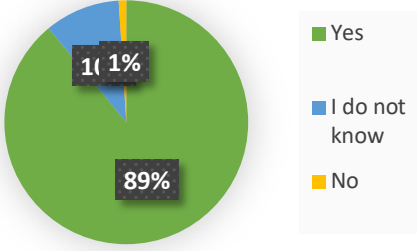
Questions	Responses			Chart
	Yes	I do not know	No	
I have a proper understanding of the Virtual Learning Environment (VLE).	151	30	19	
Based on the responses of the students, it is seen that 75% of the students have a proper understanding of the VLE, 15% are not sure about it and 10% have no proper knowledge.				

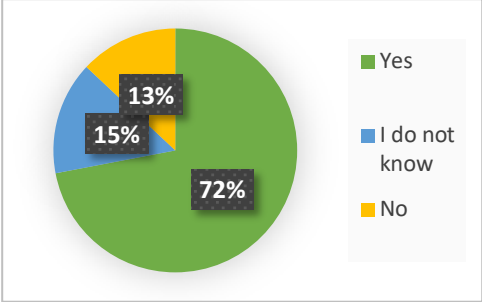
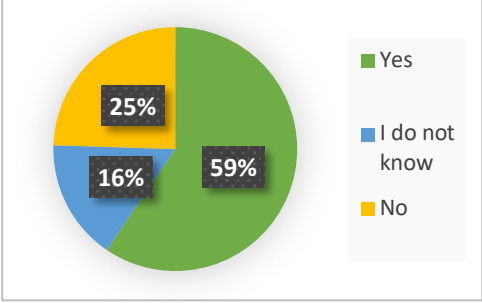
I see VLE as a positive addition to the area of education.	120	50	30	 <table><tr><td>Yes</td><td>60%</td></tr><tr><td>I do not know</td><td>25%</td></tr><tr><td>No</td><td>15%</td></tr></table>	Yes	60%	I do not know	25%	No	15%
Yes	60%									
I do not know	25%									
No	15%									
Based on the student's response it is seen that 60% of them see VLE as a positive addition to their education, whereas 25% are not sure and 15% do not agree.										
I have easy access to Moodle	177	15	8	 <table><tr><td>Yes</td><td>88%</td></tr><tr><td>I do not know</td><td>8%</td></tr><tr><td>No</td><td>4%</td></tr></table>	Yes	88%	I do not know	8%	No	4%
Yes	88%									
I do not know	8%									
No	4%									
Based on the student's responses, it is seen that 88% of them have easy access to Moodle. However, 8% are not sure yet and 4% still find it difficult to access Moodle.										

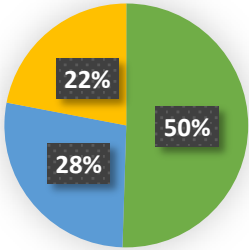
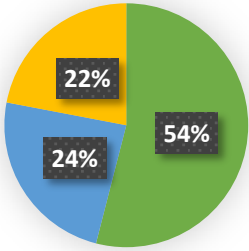
I face issues while using Moodle	29	50	121	 ■ Yes ■ I do not know ■ No
Based on the responses of the student's it is seen that 61% of them do not face any issues while using Moodle, whereas 25% are still struggling to find out and 14% of them are facing issues.				
Moodle has helped me to continue my study effortlessly.	155	40	5	 ■ Yes ■ I do not know ■ No
Based on the responses of the students, it is seen that 77% of them are studying effortlessly with Moodle, 20% are still not sure and only 3% of them are still struggling.				

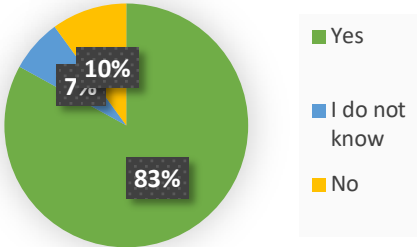
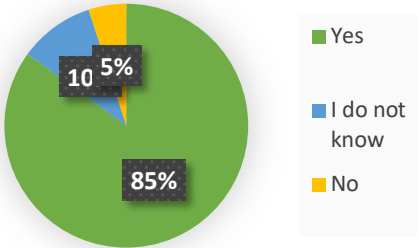
Moodle has proved to be satisfactorily interactive	118	50	32	 A pie chart illustrating the distribution of student responses regarding Moodle's interactivity. The chart is divided into three segments: a large green segment representing 'Yes' at 59%, a medium blue segment representing 'I do not know' at 25%, and a smaller yellow segment representing 'No' at 16%. A legend to the right of the chart identifies the colors: green for 'Yes', blue for 'I do not know', and yellow for 'No'.
Based on the student's responses, here 59% of them think Moodle to be interactive. However, the rest of the 41% are still unsure and do not think of Moodle as an interactive platform.				
Moodle has a positive impact over my learning.	110	57	33	 A pie chart illustrating the distribution of student responses regarding the positive impact of Moodle on learning. The chart is divided into three segments: a large green segment representing 'Yes' at 55%, a medium blue segment representing 'I do not know' at 28%, and a smaller yellow segment representing 'No' at 17%. A legend to the right of the chart identifies the colors: green for 'Yes', blue for 'I do not know', and yellow for 'No'.
Based on the student's responses, it is seen that 55% of the student believe Moodle has impacted positively on their learning, whereas 28% of them are not sure yet and 17% do not think so.				

I face no difficulties while giving exams on Moodle	136	35	29	
Based on the student's responses, it is seen that 68% of them do not face any issues while giving exams using Moodle. However, 17% are struggling to find out and 15% of them are facing issues.				
I understand and learn my study materials effortlessly through Moodle	129	30	41	
Based on the student's responses, it is seen that 64% of them understand their study lessons properly using Moodle. But 15% of them are not sure yet and 21% do not find it effortless to understand their lessons.				

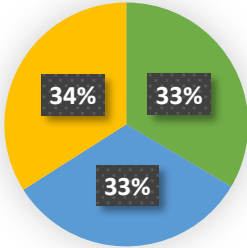
Moodle has made my study program more organised than before.	169	20	11	 ■ Yes ■ I do not know ■ No
Based on the student's response, it is seen that 84% of their study program got organised after using Moodle, whereas 10% are not sure and 6% do not agree with the statement.				
I can easily access anything at any time related to my study through Moodle	178	20	2	 ■ Yes ■ I do not know ■ No
Based on the student's response, 89% of them can easily access their study materials through Moodle, whereas 10% of them are not sure yet and only 1% of them cannot access it.				

Moodle has increased my academic productivity	144	30	26	
Based on the student's responses, 72% of them think that Moodle has increased their academic productivity, whereas 15% are not sure yet and 13% do not think that their productivity has increased.				
Moodle has made me an independent learner	119	32	49	
Based on the student's responses, Moodle has made 59% of them independent learners, whereas 16% of them are not used yet and 25% still did not reach that stage.				

Moodle has increased my knowledge and fluency over technology	101	55	44	 ■ Yes ■ I do not know ■ No
Based on the responses, 50% of them think Moodle has increased their fluency and knowledge over technology and the rest of them do not think so.				
I find it fun and convenient to learn through Moodle	108	48	44	 ■ Yes ■ I do not know ■ No
Based on the responses, 54% of them are enjoying learning through Moodle but the rest of them do not think so.				

I have well adapted to learn through Moodle.	166	14	20	 A pie chart illustrating the responses to the statement 'I have well adapted to learn through Moodle.' The chart is divided into three segments: a large green segment representing 'Yes' at 83%, a blue segment representing 'I do not know' at 10%, and a small yellow segment representing 'No' at 7%. A legend to the right of the chart identifies the colors: green for 'Yes', blue for 'I do not know', and yellow for 'No'.
Based on the responses, 83% of them have become well adapted to Moodle, whereas 7% of them are not sure and 10% of them do not think so.				
Moodle requires more improvement for being user-friendly.	170	20	10	 A pie chart illustrating the responses to the statement 'Moodle requires more improvement for being user-friendly.' The chart is divided into three segments: a large green segment representing 'Yes' at 85%, a blue segment representing 'I do not know' at 10%, and a small yellow segment representing 'No' at 5%. A legend to the right of the chart identifies the colors: green for 'Yes', blue for 'I do not know', and yellow for 'No'.
Based on the responses, 85% of them think Moodle requires improvement, whereas 15% of them are okay with the current user interface.				

Moodle has reduced the need for physical contact in education.	99	50	51	A pie chart with three segments: a green segment representing 'Yes' at 49%, a blue segment representing 'I do not know' at 25%, and a yellow segment representing 'No' at 26%. A legend to the right of the chart identifies the colors: green for 'Yes', blue for 'I do not know', and yellow for 'No'.
Based on the responses, 49% of them think Moodle has reduced the need for physical education by rest of them do not agree with the statement.				
I would like to continue my studies through Moodle	95	39	66	A pie chart with three segments: a green segment representing 'Yes' at 47%, a blue segment representing 'I do not know' at 20%, and a yellow segment representing 'No' at 33%. A legend to the right of the chart identifies the colors: green for 'Yes', blue for 'I do not know', and yellow for 'No'.
Based on the responses, 47% of them would like to continue their studies through Moodle but the rest of them are reluctant to do so.				

I prefer Moodle over the traditional physical form of education.	67	65	68	<table><tr><th>Response</th><th>Percentage</th></tr><tr><td>Yes</td><td>33%</td></tr><tr><td>I do not know</td><td>33%</td></tr><tr><td>No</td><td>34%</td></tr></table>	Response	Percentage	Yes	33%	I do not know	33%	No	34%
Response	Percentage											
Yes	33%											
I do not know	33%											
No	34%											
Based on the responses, 33% of them prefers Moodle over physical education, whereas the rest of them do not think that.												

Conclusion

This research was aimed to understand what impacts VLE and one of its platforms Moodle has over the education and learning over the students of UWTSD London Campus. Both the secondary and primary data collection has shown a detailed insight into this area of research. Most of the primary data collected from the students of the campus has shown positive results, which indicates a good experience and learning through Moodle. However, some of the areas have shown mixed emotions, which represented that even though students are quite adapted to Moodle and learning effortlessly, still there are some areas of improvement for the betterment of everyone. In the next section, a few recommendations are suggested which could be used by the UWTSD London campus to make Moodle more effective and useful for the students to create a convenient and interactive educational learning environment.

Recommendations

- The institution authority and the tutors should focus on making the study program more interactive so that students do not feel detached or lose their concentration easily (Lara-Alecio et al., 2021).
- They should make some improvements on the feature of Moodle so that students accept it more positively and do not compare it more often with the physical education (Pakanen et al., 2020).
- The authority and the tutors should focus on knowing that whether every student is accessing the materials and learning independently and, if not, then try to solve the issues by offering assistance.

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Appendix

Questions	Responses		
	Yes	I do not know	No
I have a proper understanding of the Virtual Learning Environment (VLE).	151	30	19
I see VLE as a positive addition to the area of education.	120	50	30
I have easy access to Moodle	177	15	8
I face issues while using Moodle	29	50	121
Moodle has helped me to continue my study effortlessly.	155	40	5
Moodle has proved to be satisfactorily interactive	118	50	32
Moodle has a positive impact over my learning.	110	57	33
I face no difficulties while giving exams on Moodle	136	35	29
I understand and learn my study materials effortlessly through Moodle	129	30	41
Moodle has made my study program more organised than before.	169	20	11
I can easily access anything at any time related to my study through Moodle	178	20	2
Moodle has increased my academic productivity	144	30	26
Moodle has made me an independent learner	119	32	49
Moodle has increased my knowledge and fluency over technology	101	55	44
I find it fun and convenient to learn through Moodle	108	48	44
I have well adapted to learn through Moodle.	166	14	20
Moodle requires more improvement for being user-friendly.	170	20	10

Moodle has reduced the need for physical contact in education.	99	50	51
I would like to continue my studies through Moodle	95	39	66
I prefer Moodle over the traditional physical form of education.	67	65	68