

Digital Skills and research methods

Term 2 October 2020

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Impact of Virtual Learning Environment (VLE) – Moodle on students’ learning experience at the University of Wales Trinity Saint David London Campus

Introduction

The Virtual Learning Environment (VLE) has been gaining prominence with the digital transformation of the educational sector. It is a web-based software system which is designed to facilitate the online learning and teaching practices with the application of different tools and activities (Huggins-Manley et al., 2019). It has been found that the use of VLE-Moodle has been found to help the students to complete their assignments and retrieve resources and notes by inducing independent learning. However, there is a significant impact of VLE on the student’s academic achievement but also encompasses certain challenges for the students’ learning experience (Boulton, Kent and Williams, 2018). The aim of this research is to conduct an analysis on the impact of Virtual Learning Environment (VLE) which is Moodle on the learning experience of the students from University of Wales Trinity Saint David London Campus. This research report has discussed the importance of VLE in the University of Wales Trinity Saint David London Campus and analysed both the positive and negative impact of VLE on student’s learning experience at the University. Further, the report has also suggested ways to overcome the negative impacts of VLE on student’s learning experience at the University.

Research-Informed Literature

According to Alves, Miranda and Morais (2017), it had been observed that virtual learning environment also called as VLE is appropriately lined with formal learning and takes into consideration to develop the relationship between the university, students and professors. VLE is another form of learning wherein students are encouraged to participate in discussions, utilise resources to carry out classroom activities from the comfort of their homes. There are several important aspects of VLE that could be found to be effective in universities such as modernising or creating an online education platform would allow students to spend more time on courses and help them clarify their doubts without the stress of stretching classes in the physical environment (Lee, 2019).

Virtual Learning Environment (VLE) has become a common trend among universities in the UK. VLE has provided an opportunity for universities to extend their normal classroom lessons online so that students can easily access notes and other information related to courses and modules at any point in time. Ryan and Poole (2019) had opined that VLE has been responsible for positively impacting the learning experiences of students in the university. It has been found out that the use of the option of virtual learning has seemed to increase satisfaction and engagement level of students in terms of attending courses regularly as compared to physical classes. It is majorly because students through VLE can access their course portal as their flexible time and can easily download notes, participate in quizzes and submit their assignment for correction without taking the stress of visiting the university (Barker and Gossman, 2013). All of these benefits of VLE help in enhancing student learning experiences.

Apart from the benefits of VLE, certain challenges need to be considered such as it restricts social and emotional interaction of students which takes place in a physical classroom setting. Thus, in regards to overcome the issue, it becomes crucial for module instructor in the university to organise a weekly virtual meeting so that students get to interact and share their ideas and solve issues faced in the course. Consequently, necessary teacher training should be offered before starting VLE in the university (Herrera Mosquera, 2017). Trained teachers would be able to submit notes, conduct online exams, respond to student's queries, assess & monitor assignment submissions and generate feedback regularly so that students feel engaged and connected with VLE and thereby increase their learning experience.

Methods

Research philosophy in research is based on the development of knowledge through appropriate source and nature of research. Philosophy also takes into account to find out ways through which data could be collected, analysed and implied to obtain research findings. In the current study, the researcher would be using pragmatism philosophy as it takes into consideration of use of both interpretivism and positivism philosophy to develop knowledge of the impact of VLE on enhancing student's learning experience (Sandbothe, 2012). Consequently, research approaches are also crucial it allows the researcher to plan through which the entire research study would be

completed in time. In the current study, the researcher would be applying a triangulation design. This research approach would allow the researcher to obtain and substantiate primary and secondary data with each other to measure the impact of VLE on student's learning experience (Flick, 2018).

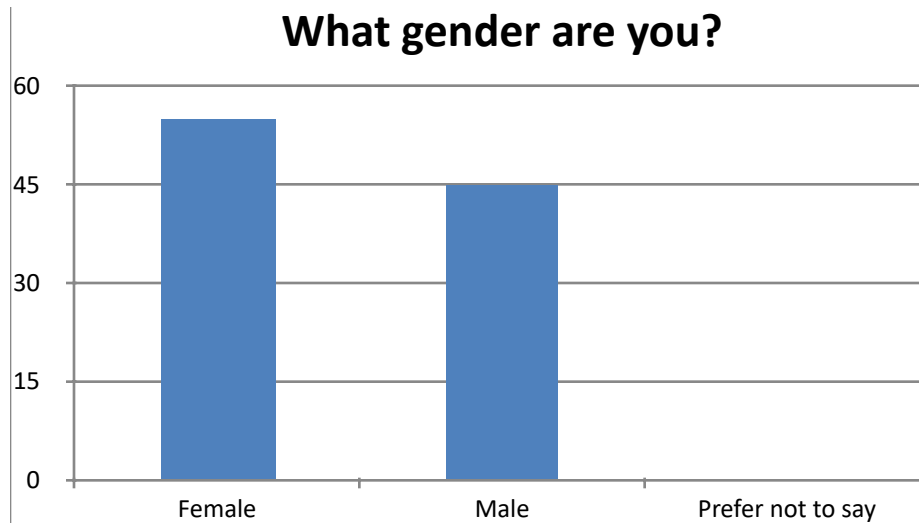
Moreover, in terms of data collection, it could be said that the researcher has focused on applying both primary data and secondary data collection methods to gather abundant resources on the effectiveness of VLE on enhancing student's learning experiences in the university (Zozus, 2017). The primary data would be collected through a questionnaire survey comprising of 14 close-ended questions. 20 students from the University of Wales Trinity Saint David London Campus has been approached for the survey and their email ids are retrieved wherein questionnaire would be sent. Secondary data would be gathered through journal articles, books and websites. Thereby, in-terms of data analysis, it could be said that the researcher would be analysing data gathered from the questionnaire survey through the help of quantitative analysis which would be later represented through graphs and charts. The secondary data gathered on the impact of VLE on student's learning experience would be analysed using descriptive analysis (Rose and McKinley, 2019). Finally, in terms of ethics, it can be said that the researcher would be abiding by the privacy and confidentiality laws of the university to ensure that research data are kept confidential. Moreover, participants should be provided with a detailed explanation of the purpose of the survey as well as methods used to safeguard their data from being stolen.

Analysis

Primary Data Collection

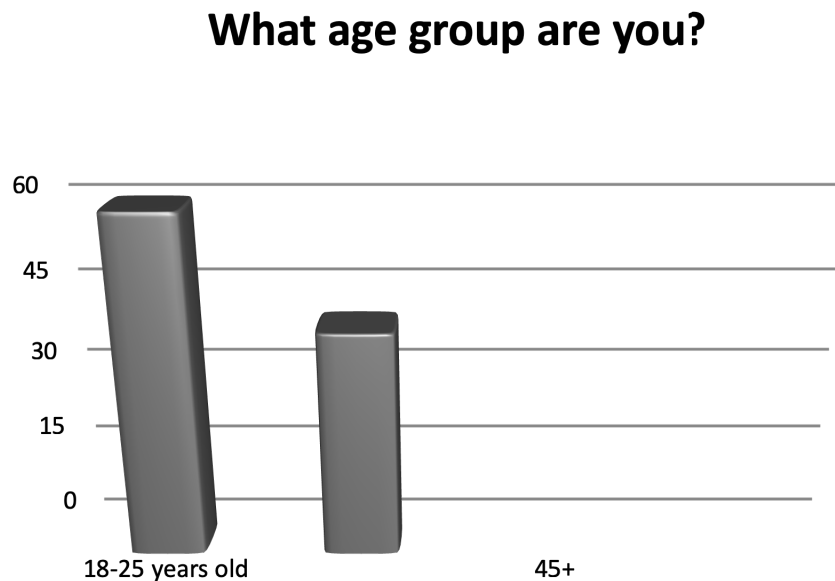
The findings from the questionnaire survey on the 20 students from the University have been presented below:

1. What gender are you?



The graph represents that around 55% of the respondents in the survey are female as compared to 45% of males.

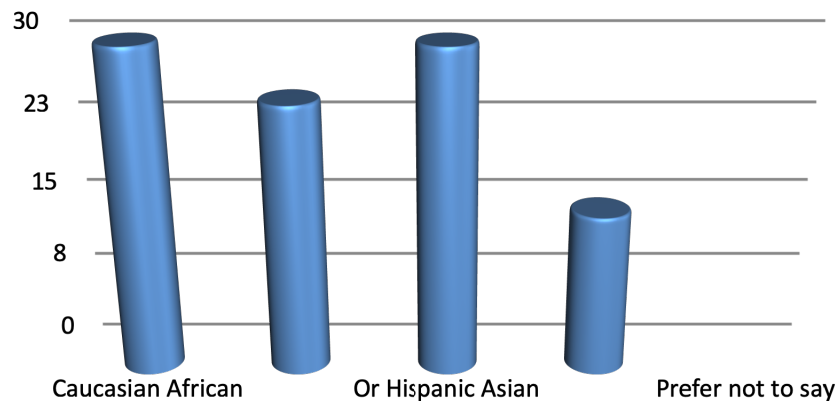
2. What age group are you?



The observations derived from the survey show that 60% of the survey participants belong from 18-25 years age group whereas 40% are from 25-35 years.

3. Please specify your ethnicity

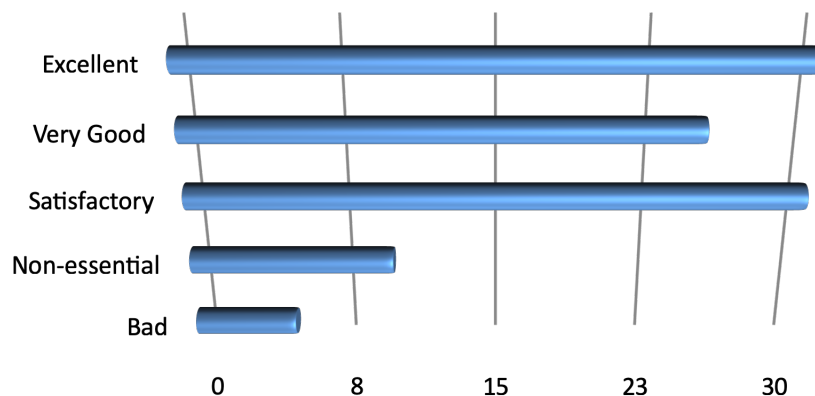
Please specify your ethnicity



The graph indicates that 30% belong from Caucasian African and Hispanic Asian respectively whereas 25% belong from American Latino.

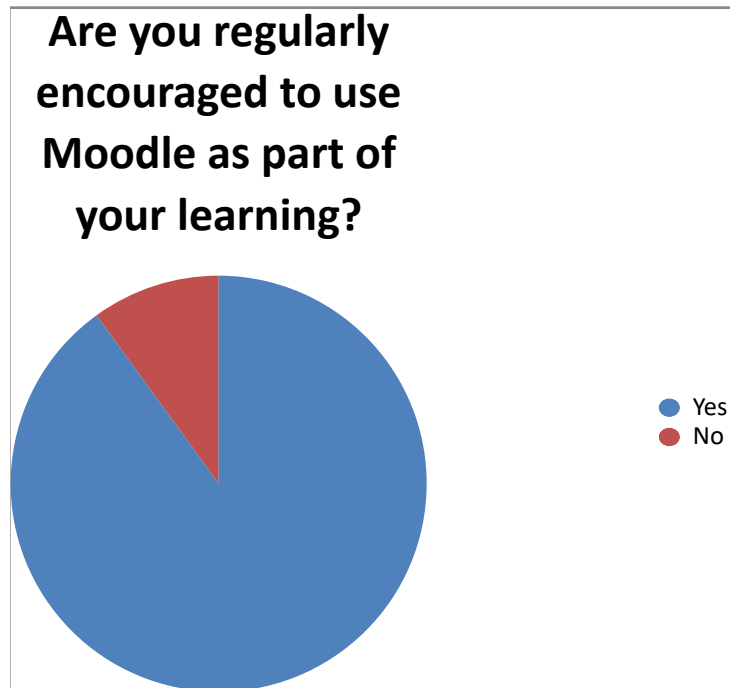
4. Fill in the blank: In your opinion, the Moodle is a(an) tool to students?

**Fill in the blank: In your opinion,
the Moodle is a (an) tool to
students?**



The results of the survey highlight that 30% of the respondents have termed it to be satisfactory & excellent whereas only 15% in total have categorised Moodle to be bad and non-essential.

5. Are you regularly encouraged to use Moodle as part of your learning?



90% of the overall participants of the survey have stated that they have been encouraged to use Moodle at every stage their learning in the university as compared to only 10% who thinks otherwise.

6. Were you given a training session on the Moodle as part of your course?

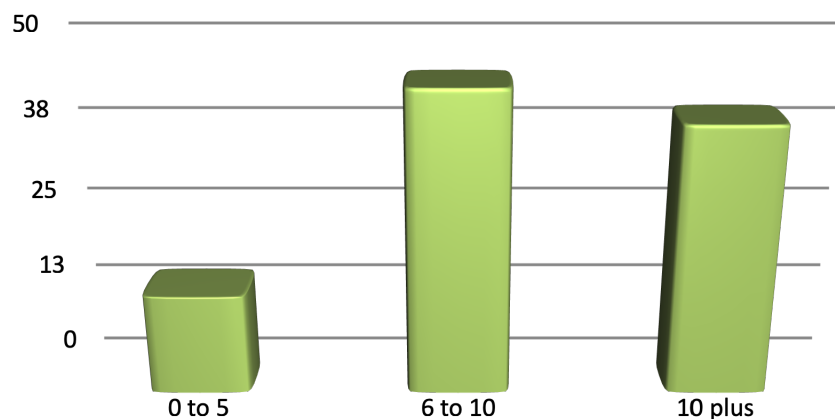
**Were you given
a training
session on the
Moodle as part
of your course?**



80% of the respondents to the survey stated that they haven't received any form of training session on Moodle as compared to 20% have stated to receive training to use Moodle.

7. How many hours per week do you access Moodle:

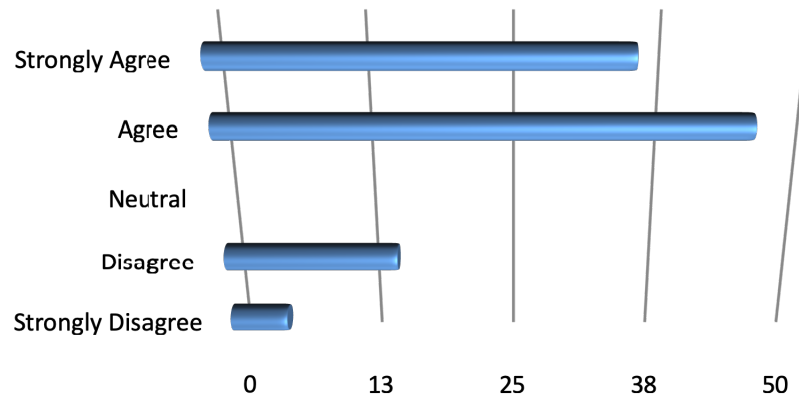
How many hours per week do you access Moodle:



85% of the combined respondents have said that they access Moodle for more than 6 to 10 hours weekly to 15%, who uses it for less than 5 hours.

8. In your option, the navigating on Moodle is considered easy?

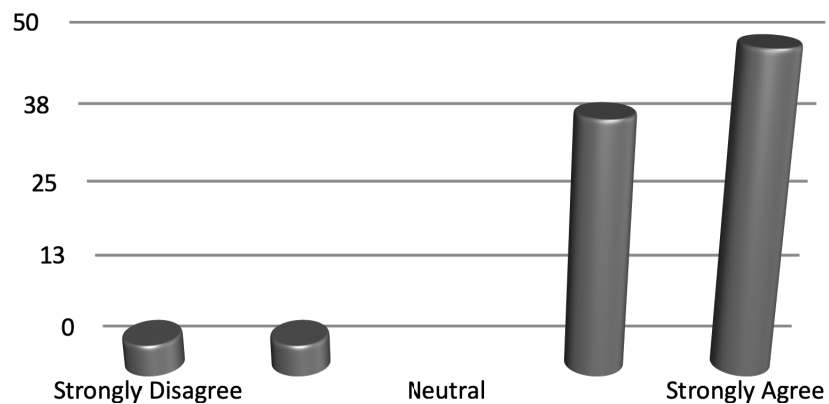
In your option, the navigating on Moodle is considered easy?



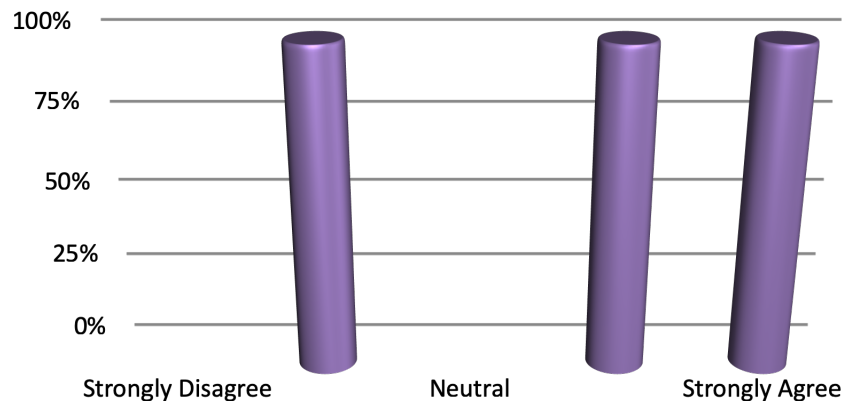
The graphs represent that majority of 80% of the respondents feel navigating Moodle to be easy as compared to 20%, who finds Moodle to be difficult.

9. Moodle is a great tool for the following:

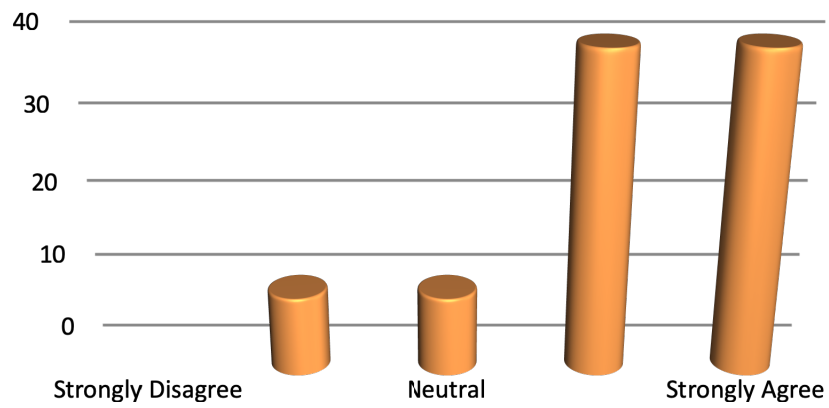
Classes Materials such as slides and other documents



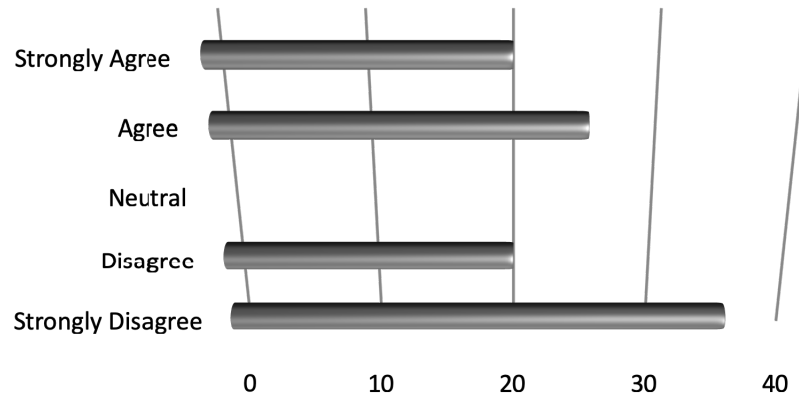
Library



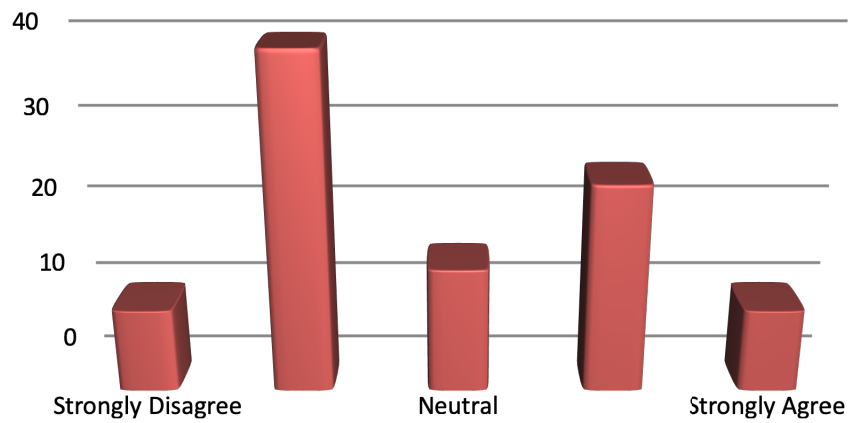
Calendar



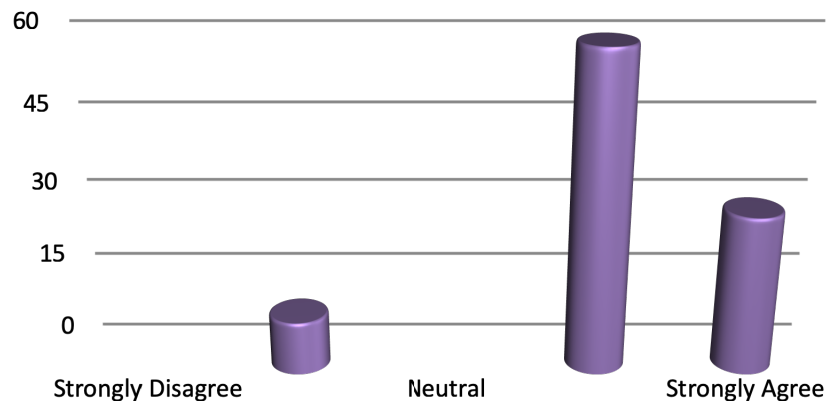
Service Desk



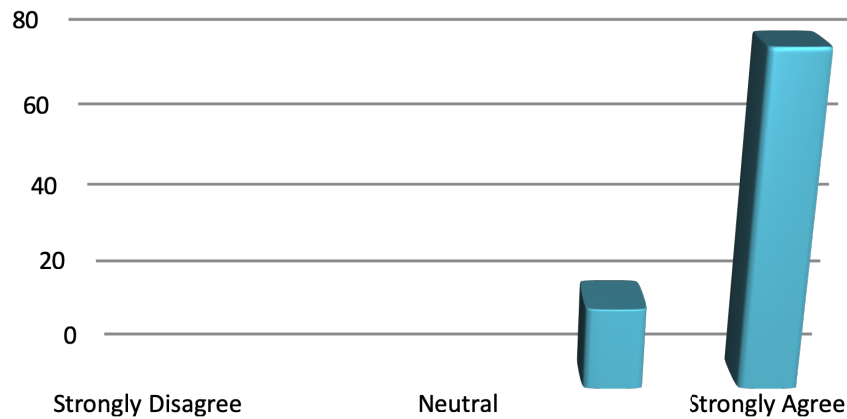
Email



Revision



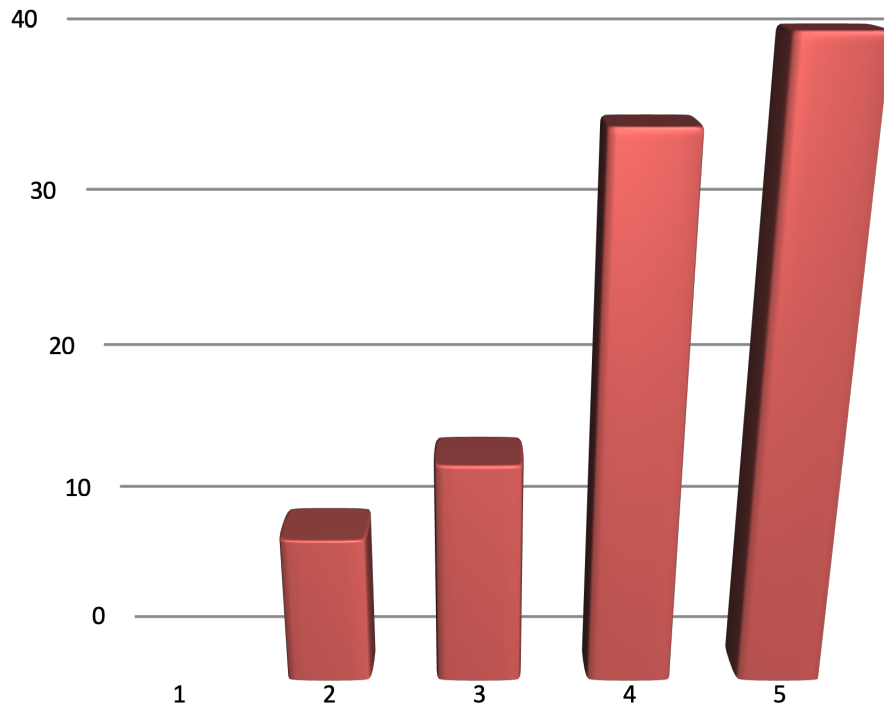
Delivery your coursework



Thus, as far as the effectiveness of the tool of Moodle is concerned, it could be said that students within the university find it effective for delivering their coursework (80% strongly agree and 20% agree), communicating with teachers (90%), revision (90%), library (95%), calendar (80%) and assessing class materials (90%). However, there are certain percentages of students who feel that the service desk (55% strongly disagree and disagree) and email services (50% strongly disagree and disagree) within Moodle are ineffective.

10. In a scale of 1 to 5, how would you define the Moodle service at the University of Wales Trinity Saint David London Campus:

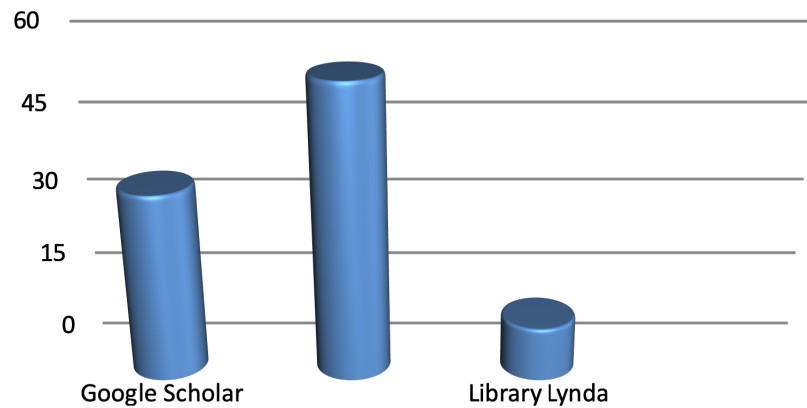
**In a scale of 1 to 5, how would you define
the Moodle service at the University of
Wales Trinity Saint David London Campus:**



The results of the survey indicate that majority of 40% of the respondents have rated Moodle services at University of Wales Trinity Saint David London Campus to be a great tool as compared to 10% who have rated it 2 on the scale of 5.

11. What online search engine do you use the most when you are studying at home?

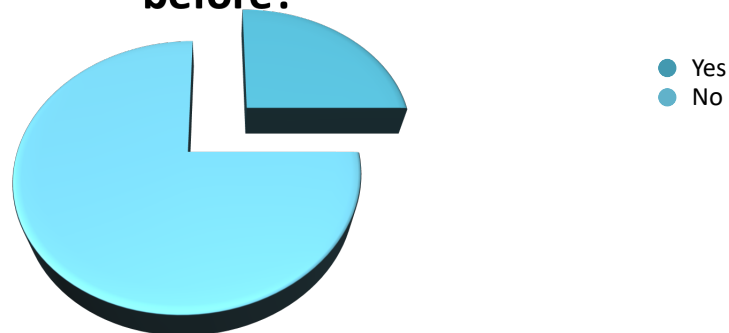
What online search engine do you use the most when you are studying at home?



The graph shows that 55% of the students prefer to use Moodle Library as compared to 35% and 10% for Google Scholar and Library Lynda at home.

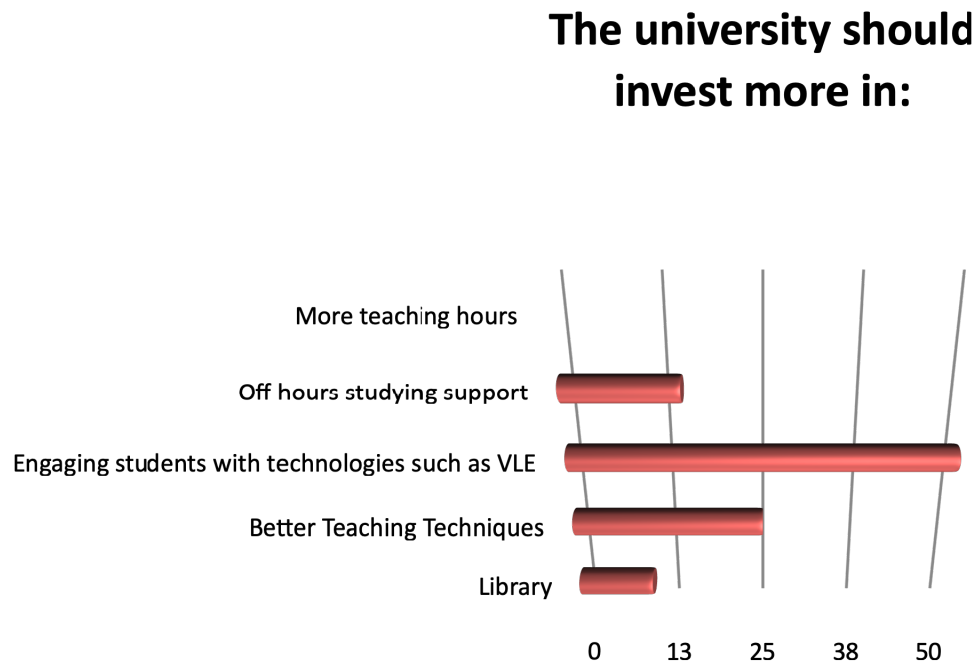
12. Have you asked any of the student colleges for help with the Moodle before?

Have you asked
any of the
student colleges
for help with
the Moodle
before?



The student's response to the question states that 75% of the respondents do not take help from other students as compared to 25%.

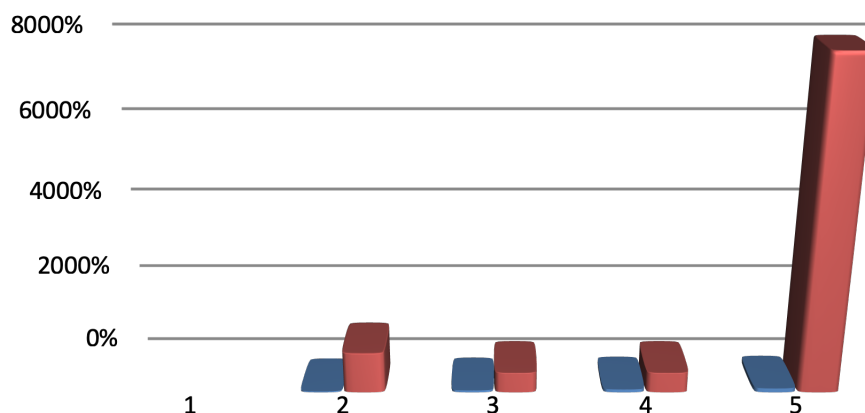
13. The university should invest more in:



As far as the responses of the survey, it could be said that 50% of the students feel that the university should invest more on including technologies in VLE as compared to 10% of the students opposing enhancing of library services.

14. Finally, during the lockdown, your Moodle access has increased approximately:

Finally, during the lockdown, your Moodle access has increased approximately:



The responses indicate that 80% of the respondents have completely relied on Moodle services during the lockdown.

Secondary Data Collection

VLE or Virtual Learning Environment has been a common practice at the University of Wales Trinity Saint David London Campus (UWTSD) as the university has been engaged in offering online full and part-time courses for domestic and international students. The VLE provides a centre of a learning experience for students online through support platforms (Uwtsdweb, 2020). The importance of VLE in UWTSD is that it had benefited students to use Moodle as a VLE platform to enjoy the user-friendly experience in terms of accessing courses meant to be studied from a far distance.

According to Boulton, Kent and Williams (2018), it had been observed that more usage of VLE among students results in increasing their learning. It is majorly because VLE offers a wide range of services required by students to excel and grow professionally without visiting the physical classroom. In the case of UWTSD, it could be seen that VLE provides its online students with facilities to gain access to library & learning resources, student support services for needs assessment and support from specialist tutors (Uwtsdweb, 2020). VLE ensures that online

students can receive constant support as compared to physical students on the campus. On the contrary, Islam, Beer and Slack (2015) had opined that communication becomes a major issue in VLE as the time difference between students and teachers at UWTSD makes it difficult to interact live regularly. Thus, it becomes crucial for teachers at UWTSD to work in shifts to ensure that all online students receive guidance and support every time. Moreover, it should also be noted that learning through VLE often creates a distraction in studies as online students are most likely to browse the internet and play the game in between courses thereby making it difficult for them to enhance their learning experience.

Conclusion

Thus, in conclusion, it can be said that the VLE has been both an intriguing and challenging learning tool which needs assessment. In regards to the research report, it was found that the students have positively accepted the use of VLE in their daily learning process. It has been observed from the survey that large percentage of students prefer to use Moodle services as they find it as an excellent tool which is useful in assessing class materials, delivering coursework, communicating with teachers, revision and library. Furthermore, it could also be said that students at UWTSD prefer technological development within the VLE so that they are required to access Google Scholar and Lynda Library for materials. On the rating of 5, majority of the students have rated Moodle of UWTSD to be 5 whereas some group of students believe that email and service desk services should be removed as it creates confusion among them.

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Appendix

Questionnaire Survey

1. What gender are you?

- a. Female
- b. Male
- c. Prefer not to say

2. What age group are you?

- a. 18-25 years old
- b. 25-35 years old
- c. 45+
- d. Prefer not to answer

3. Please specify your ethnicity

- a. Caucasian African
- b. American Latino
- c. Or Hispanics Asian
- d. Other/Unknown
- e. Prefer not to say

4. Fill in the blank: In your opinion, the Moodle is a(an) tool to students?

- a. Bad
- b. Non-essential
- c. Satisfactory

d. Very Good

e. Excellent

5. Are you regularly encouraged to use Moodle as part of your learning?

a. Yes

b. No

6. Were you given a training session on the Moodle as part of your course?

a. Yes

b. No

7. How many hours per week do you access Moodle:

a. 0 to 5

b. 6 to 10

c. 10 plus

8. In your option, the navigating on Moodle is considered easy?

a. Strongly Disagree

b. Disagree

c. Neutral

d. Agree

e. Strongly Agree

9. Moodle is a great tool for the following:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Classes Materials such as slides and other documents					
Library					
Calendar					
Service Desk					
Email					
Revision					
Communicate with your teachers					
Delivery your coursework					

10. In a scale of 1 to 5, how would you define the Moodle service at the University of Wales Trinity Saint David London Campus:

	1	2	3	4	5	
Not Helpful						Great Tool

11. What online search engine do you use the most when you are studying at home?

	Tick the box
Google Scholar	
Moodle Library	
Library Lynda	
Others	

12. Have you asked any of the student colleges for help with the Moodle before?

a. Yes

b. No

13. The university should invest more in:

a. Library

b. Better Teaching Techniques

c. Engaging students with technologies such as VLE

d. Off hours studying support

e. More teaching hours

14. Finally, during the lockdown, your Moodle access has increased approximately:

	Tick the box
0%	
25%	
50%	
75%	
100%	

Survey Response

1. What gender are you?		
<i>Responses</i>	<i>No. of Respondents</i>	<i>Frequency Percentage</i>
Female	11	55
Male	9	45
Prefer not to say	0	0
Total	20	100

2. What age group are you?		
<i>Responses</i>	<i>No. of Respondents</i>	<i>Frequency Percentage</i>
18-25 years old	12	60
25-35 years old	8	40
45+	0	0
Prefer not to answer	0	0
Total	20	100

3. Please specify your ethnicity		
<i>Responses</i>	<i>No. of Respondents</i>	<i>Frequency Percentage</i>
Caucasian African	6	30
American Latino	5	25
Or Hispanic Asian	6	30
Other/Unknown	3	15
Prefer not to say	0	0
Total	20	100

4. Fill in the blank: In your opinion, the Moodle is a(an) tool to students?

<i>Responses</i>	<i>No. of Respondents</i>	<i>Frequency Percentage</i>
Bad	1	5
Non-essential	2	10
Satisfactory	6	30
Very Good	5	25
Excellent	6	30
Total	20	100

5. Are you regularly encouraged to use Moodle as part of your learning?		
<i>Responses</i>	<i>No. of Respondents</i>	<i>Frequency Percentage</i>
Yes	18	90
No	2	10
Total	20	100

6. Were you given a training session on the Moodle as part of your course?		
<i>Responses</i>	<i>No. of Respondents</i>	<i>Frequency Percentage</i>
Yes	4	20
No	16	80
Total	20	100

7. How many hours per week do you access Moodle:		
<i>Responses</i>	<i>No. of Respondents</i>	<i>Frequency Percentage</i>
0 to 5	3	15
6 to 10	9	45
10 plus	8	40
Total	20	100

8. In your option, the navigating on Moodle is considered easy?

<i>Responses</i>	<i>No. of Respondents</i>	<i>Frequency Percentage</i>
Strongly Disagree	1	5
Disagree	3	15
Neutral	0	0
Agree	9	45
Strongly Agree	7	35
Total	20	100

9. Moodle is a great tool for the following:**Classes Materials such as slides and other documents**

<i>Responses</i>	<i>No. of Respondents</i>	<i>Frequency Percentage</i>
Strongly Disagree	1	5
Disagree	1	5
Neutral	0	0
Agree	8	40
Strongly Agree	10	50
Total	20	100

Library

<i>Responses</i>	<i>No. of Respondents</i>	<i>Frequency Percentage</i>
Strongly Disagree	0	0
Disagree	1	5
Neutral	0	0
Agree	12	60

Strongly Agree	7	35
Total	20	100

Calendar		
<i>Responses</i>	<i>No. of Respondents</i>	<i>Frequency Percentage</i>
Strongly Disagree	0	0
Disagree	2	10
Neutral	2	10
Agree	8	40
Strongly Agree	8	40
Total	20	100

Service Desk		
<i>Responses</i>	<i>No. of Respondents</i>	<i>Frequency Percentage</i>
Strongly Disagree	7	35
Disagree	4	20
Neutral	0	0
Agree	5	25
Strongly Agree	4	20
Total	20	100

Email		
<i>Responses</i>	<i>No. of Respondents</i>	<i>Frequency Percentage</i>
Strongly Disagree	2	10
Disagree	8	40
Neutral	3	15

Agree	5	25
Strongly Agree	2	10
Total	20	100

Revision		
<i>Responses</i>	<i>No. of Respondents</i>	<i>Frequency Percentage</i>
Strongly Disagree	0	0
Disagree	2	10
Neutral	0	0
Agree	12	60
Strongly Agree	6	30
Total	20	100

Communicate with your teachers		
<i>Responses</i>	<i>No. of Respondents</i>	<i>Frequency Percentage</i>
Strongly Disagree	0	0
Disagree	0	0
Neutral	0	0
Agree	7	35
Strongly Agree	13	65
Total	20	100

Delivery your coursework		
<i>Responses</i>	<i>No. of Respondents</i>	<i>Frequency Percentage</i>
Strongly Disagree	0	0
Disagree	0	0

Neutral	0	0
Agree	4	20
Strongly Agree	16	80
Total	20	100

10. In a scale of 1 to 5, how would you define the Moodle service at the University of Wales Trinity Saint David London Campus:

<i>Responses</i>	<i>No. of Respondents</i>	<i>Frequency Percentage</i>
1	0	0
2	2	10
3	3	15
4	7	35
5	8	40
Total	20	100

11. What online search engine do you use the most when you are studying at home?

<i>Responses</i>	<i>No. of Respondents</i>	<i>Frequency Percentage</i>
Google Scholar	7	35
Moodle Library	11	55
Library Lynda	2	10
Others	0	0
Total	20	100

12. Have you asked any of the student colleges for help with the Moodle before?

<i>Responses</i>	<i>No. of Respondents</i>	<i>Frequency Percentage</i>
Yes	5	25

No	15	75
Total	20	100

13. The university should invest more in:		
<i>Responses</i>	<i>No. of Respondents</i>	<i>Frequency Percentage</i>
Library	2	10
Better Teaching Techniques	5	25
Engaging students with technologies such as VLE	10	50
Off hours studying support	3	15
More teaching hours	0	0
Total	20	100

14. Finally, during the lockdown, your Moodle access has increased approximately:		
<i>Responses</i>	<i>No. of Respondents</i>	<i>Frequency Percentage</i>
0%	0	0
25%	2	10
50%	1	5
75%	1	5
100%	18	80
Total	20	100