

Digital Skills and Research Methods BMSW4003

The Impact of Virtual Learning Environment – Moodle on The Learning Experience of Students at UWTSD London Campus

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ABSTRACT

Virtual Learning Environment is an advancement of technology used mostly in educational institution and some businesses to help with the delivery of lessons, activities and increase students' capabilities. The goal of this report is to see how Moodle, a virtual learning environment, affects students' learning experiences. The aims of the research are to: comprehend the notion of VLEs and its increase in the learning and teaching sector; understand the role of Moodle as a VLE in student learning; and the difficulties of Moodle for student learning experiences. The tool used to investigate how Moodle impacts on student's learning experiences is a ten-question survey designed for the students at the University of Wales Trinity Saint David. The responses of the survey were analysed, and the data showed that Moodle has positive and negative impacts on students learning. Positively students are finding Moodle very useful for their studies and are more likely to choose it over class-based learning. But at the same time they are concerned about their interaction with teachers and colleagues and online security.

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1. INTRODUCTION

As teaching and learning is part of our lives, researchers have made progress into finding new ways and tools to help with this process and have made technology a part of this. Normal class-based learning is now backed by online delivering of lessons, extending teaching, and learning through different virtual platforms that are meant to change university life.

The focus of this report is on one of these virtual learning platforms called Moodle and the main aim is to find if students are finding it useful in their learning experience. Moodle and other similar platforms give students and teachers a new way to study and teach.

The goal of this study is to look into the impact of various platforms especially Moodle, on students' learning experiences. VLEs come with different issues and if these issues are not discovered and addressed, sources like Moodle will result in a decrease in student learning. Furthermore, it will also be of great use to evaluate the need for these digital platforms in the educational process.

Because the students' experiences are very important, a survey was created and analysed to understand their perspectives as this will allow for access to benefits and disadvantages of VLE.

2. LITERATURE REVIEW

2.1 Introduction to Virtual Learning Environments (VLE)

In the latest period, there have been major technological advancements all around the world, that have increased digitalization in the education system. As a result, technologically based learning and teaching methods have emerged (Janssen et al., 2016). A first example of this is Virtual Learning Environments.

A virtual learning environment (VLE) is a software application that combines a variety of resources into one integrated environment, allowing learners and staff to engage online while also delivering and tracking content (Becta, 2004). According to Lineses and Aguilar (2019), this is an "electronic information system" that uses computer-based technologies and channels to assist vocational training and higher education learning.

2.2 The impact of VLE

VLEs have a somewhat impact on the teaching styles, which has both advantages and disadvantages. On the plus side, VLEs use discussion rooms and blogs to help professors and students, or staff communicate more effectively. These platforms improve the quality of learning and provide students with greater access to information. VLEs, according to Barker and Gossman (2013), stimulate progressive thinking and reflection in students, and they are more likely to have success compared to students who use traditional methods.

VLEs also make it possible to maintain track of the entire communication and learning process allowing students and staff to access these materials at any moment that is convenient for them. This can be quite beneficial to working candidates in terms of ensuring a healthy work-life balance (Miller, 2016). In comparison to traditional methods, this individualized learning also provides better descriptions. Individuals tend to be motivated in these activities and achieve better learning as a result of this.

On these platforms, there is also the possibility of other illegal activities. Cyber thefts and security breaches, according to Dhakal and Sharma (2016), and can result in individuals losing vital personal information causing major difficulties between individuals, mainly those who have minimal technological capabilities. Which is why is very important for organisations to get involved and improve these practices allocating fundings for this and resources.

2.3 Virtual Learning Platforms

Moodle

Was created with the basic principles of learning, sharing, storing, tracking, and providing an efficient "environment for learning communities" in consideration by Martin Dougiamas (Aikina, 2020). Is a virtual and digital tool that has grown widely and promotes an "eco-friendly education environment" and employs responsible procedures. Teachers can also keep course candidates up to date with personalised information and educational resources and track their progress. However, there are technological challenges, and candidates must have proper technical systems in order to benefit from such platforms, and this is another disadvantage when compared to traditional methods.

Blackboard

Is another platform that has evolved in the VLE industry. Tools like Content, contact and discussion, as well as announcements and scheduling are all part of the classroom experience that Blackboard is offering. This improves computer functionality, making it easier for people to access on-demand learning, the contents are user-friendly, which aids in the learning

process. These virtual platforms can help institutional educations and businesses expand their options. Furthermore, boosting organisational performance becomes easier because of this widely accessible and shared learning (Putka, 2020).

3. RESEARCH METHODOLOGY

3.1 Methods used

Following the objective of this research, the next step is the creation of a survey questionnaire in order to find what the students think about the use of Moodle and the impact it has on their learning at the university. A survey questionnaire is the most appropriate data collection method for this research because of the Covid 19 restrictions that impacted on the use of any other methods like interviews. The survey was conducted online to avoid public social gatherings. Without this option, the research would have been more difficult and there would have been a greater risk of people becoming infected with the virus. A computer software tool known as Survey Monkey has been used to help create the survey and analyses the data as well. The survey is closed-ended, with option responses given. The advantage of closed ended questionnaire is that the responses can be ticked and are quicker and easier to read (Dawson, 2009). The survey has ten questions and is kept short so the people taking the survey do not spend too much time on it. The online survey questions for this study focus on the students' experiences using Moodle during their courses. This contributed to a better understanding of how VLE affects people.

SurveyMonkey is a web-based survey tool that allows you to develop and administer professional online surveys. It is a well-known and effective web application where real-time analysis is carried out and while respondents complete their surveys the results are displayed straight away (Ramshaw, 2021). After a number of people answered the survey questions, the data was collected and analysed automatically by the application and is represented by graphs for each question as shown in appendix 2.

Participants were emailed links of the survey, to be completed. The United Kingdom was chosen as the study's geographical area, more specifically students that lived in London and attended a course or used to attend a course at University of Wales Trinity Saint David. The participants in the study were chosen considering their direct or indirect experience or participation with VLE platforms; their participation in Moodle activities and how often they would attend; and if there was a certain type of certification at the end of an attended course.

4. ETHICS IN DATA COLLECTION

Dawson (2009) suggests that where people's personal data is involved or considered in a research, ethical considerations must be adhered to in order to protect their privacy. Adding that anonymity and confidentiality are important to protect the participants involved in the research and all information should be treated with honesty and respect.

In the interest of getting results from the research survey, all participants have been guaranteed that their personal information is not needed when completing the survey and that they will remain anonymous. Also participants have been informed about the results and what will happen to them in case they request a copy. The report can be found at the UWTSD if someone does want to see the analysis of the survey as they have been part of the research.

5. RESULTS, FINDINGS, AND DISCUSSION

Below are shown the findings of the survey analysis with each question (shown in appendix 1) being explained individually considering the data results obtained (appendix 2) which are attached at the end of the report. Also all the results will be shared with the respondents.

Question 1 - The analysis result for this question shows that only 25 per cent of students found the training on how to use Moodle extremely helpful with 50 per cent very helpful and there are people that don't seem to find the training helpful at all which is a case of the University to have a look into it and make changes maybe.

Question 2 - The result shows that over 60 % of students find learning through Moodle very useful and out of the 24 respondents, only 2 are of the opinion that their learning is somewhat useful.

Question 3,4 - More than half of the respondents found it easy to access Moodle from anywhere and at any time with the same amount considering that age and IT skills are not an impediment for them when accessing Moodle. While there still are some mixed responses that age, and IT skills are being a factor that is affecting students access to virtual learning platforms.

Question 5 was created to find if the use of Moodle increases interaction with course content, colleagues and teachers and the findings were positive with more than 30 % strongly agreeing and almost 50 % of students agree to this.

Question 6 is about the motivation of students towards learning and the results are rather worrying as over 65 % of respondents have said that their motivation is affected by the use of the online platform.

Question 7 - On the positive side more than 60 % of students are finding learning through Moodle effective compared to in class learning meaning that learning through Moodle is working for students but is it the case for universities?

Question 8 answers the fact that students are more likely to choose virtual learning over class learning.

Question 9 - Students are very concerned about security threats when accessing the virtual learning through Moodle.

Question 10 – overall more than 60 % of students that have taken the survey would definitely recommend Moodle to others which is a good outcome.

Discussion

Having seen the result it can be said that there is an understanding of the fact that the use of VLE influences students learning in a way or another. Due to the progress in technology, the Introduction of VLE to help with teaching and learning has been a positive approach made by the university, as this gives access to students to course content and interaction with teachers.

But there are negatives about Moodle too as there are some faults that have been found. There are no social or emotional contacts between students and professors, which could be one of the major reasons for their lack of motivation. The data also shows that the Moodle system is more effective than traditional classroom lessons and that this benefits the students.

Due to cyber-crime, there is also a significant risk of data loss and security difficulties on these platforms. A reason for the University to review this and assure the students that this type of issues would be avoided as this might be a reason that some students would probably not recommend Moodle to others.

6. CONCLUSION

In the pages above we have seen an explanation of the uses and introduction of VLE platforms in the university life and that they have been a useful tool that benefits both the universities and the students. It not only helps students to access their lessons, but it is an advancement in the way subjects are being taught to students.

With the help of a survey, data was gathered and analysed to have an idea of how useful learning through Moodle is for students and the results are both positive and negative. For the Universities, Moodle is an improvement to teaching as it gives extra support to students with their learning and easy access to materials they need. While for students Moodle has proven to be more effectively than class learning maybe for the flexibility.

Obviously, there are concerns like security threats, motivation for learning is dropping and interaction with teachers and colleagues is lacking. But if Universities address these and find ways to improve student's motivation towards learning and change the way they do things, there will be positive outcomes for both students and Universities.

7. REFERENCES

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APPENDIX 1 Survey questionnaire

mobile.surveymonkey.com

← Edit ⚙️ 📧

The impact of Moodle on students learning.

Page Title

1. Did the training from University on how to use Moodle helped you enough?

☐ Extremely helpful

☐ Very helpful

☐ Somewhat helpful

☐ Not so helpful

☐ Not at all helpful

2. Do you find learning through Moodle useful?

☐ Extremely useful

☐ Very useful

☐ Somewhat useful

☐ Not so useful

☐ Not at all useful

3. Can you easily access Moodle from anywhere and anytime?

- ☐ Easy
- ☐ Neither easy nor difficult
- ☐ Difficult

4. Is your age and computing skills affecting your access to the virtual learning platform?

- ☐ A great deal
- ☐ A lot
- ☐ A moderate amount
- ☐ A little
- ☐ None at all

5. Do you agree that learning through Moodle is increasing your interaction with lecturers, course content and other students?

- ☐ Strongly agree
- ☐ Agree
- ☐ Neither agree nor disagree
- ☐ Disagree
- ☐ Strongly disagree

6. Do you feel that using Moodle affects your motivation to learn?

- ☐ Yes
- ☐ No

7. Compared to in class learning, how effective is learning through Moodle?

- ☐ Extremely effective
- ☐ Very effective
- ☐ Somewhat effective
- ☐ Not so effective
- ☐ Not at all effective

8. How likely are you to choose the virtual learning over classroom learning?

- ☐ Very likely
- ☐ Likely
- ☐ Unlikely
- ☐ Very unlikely

9. Are you concerned about security threats when using Moodle?

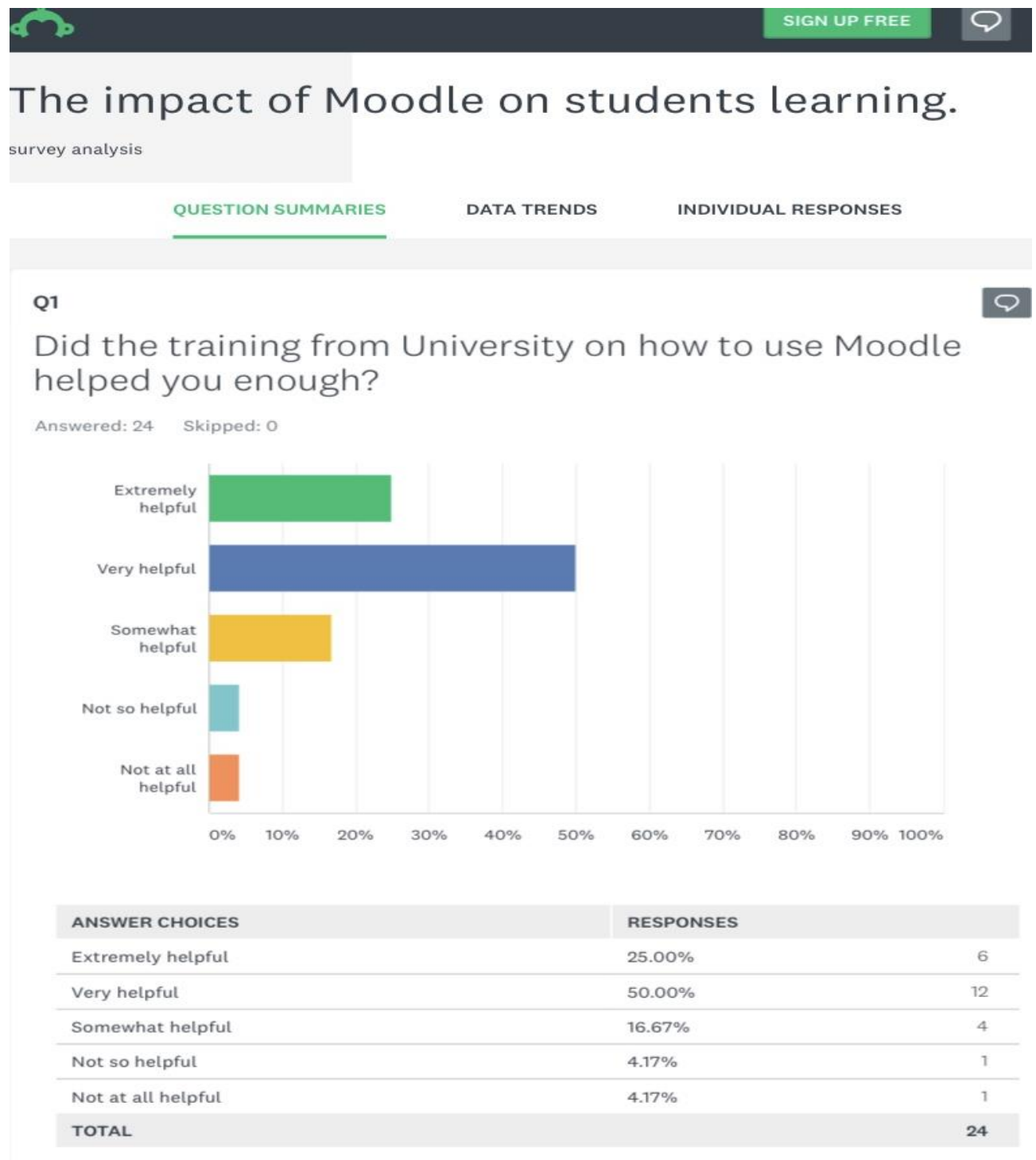
- ☐ Very concerned
- ☐ A little concerned
- ☐ Somewhat concerned
- ☐ Not concerned at all

10. Considering your experience, would you recommend Moodle to others?

- ☐ Definitely would
- ☐ Probably would
- ☐ Probably would not
- ☐ Definitely would not



APPENDIX 2 Survey analysis

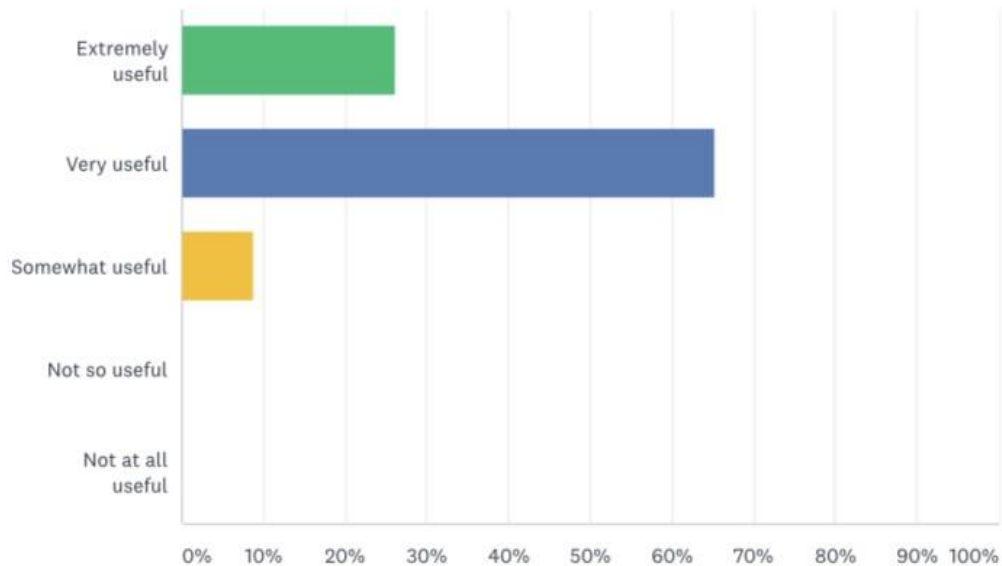


Q2



Do you find learning through Moodle useful?

Answered: 23 Skipped: 1



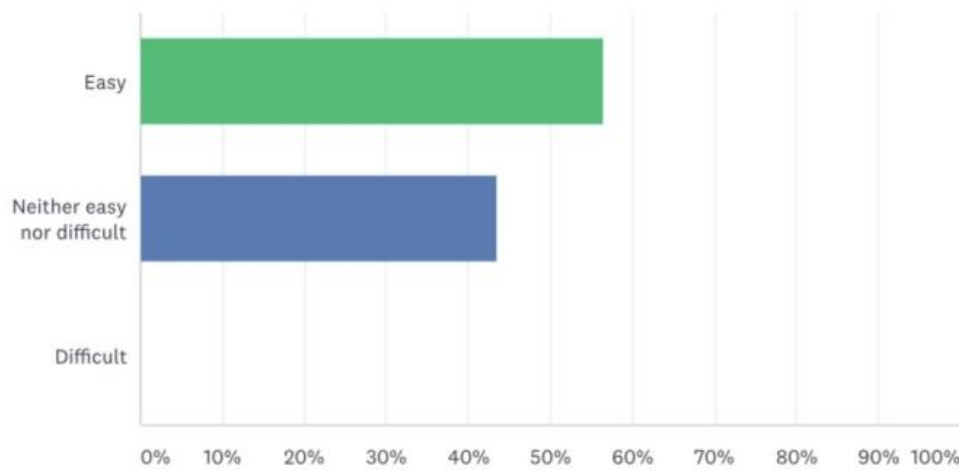
ANSWER CHOICES	RESPONSES	
Extremely useful	26.09%	6
Very useful	65.22%	15
Somewhat useful	8.70%	2
Not so useful	0.00%	0
Not at all useful	0.00%	0
TOTAL		23

Q3



Can you easily access Moodle from anywhere and anytime?

Answered: 23 Skipped: 1



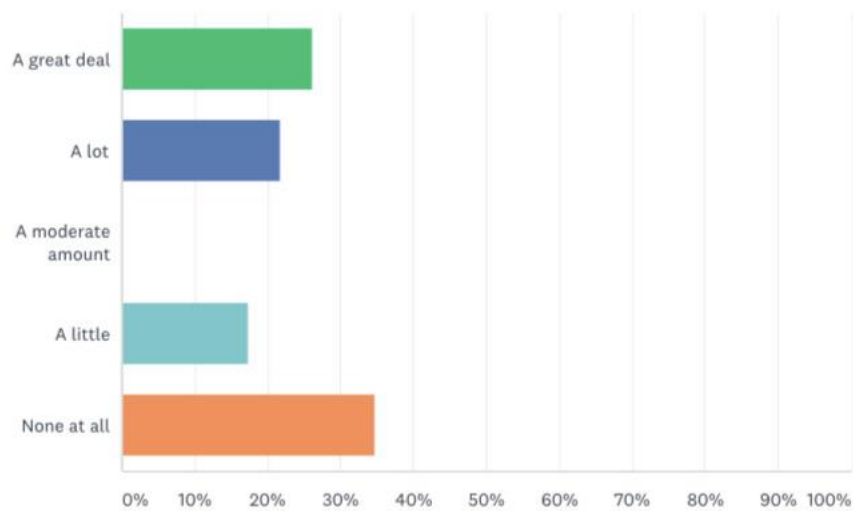
ANSWER CHOICES	RESPONSES	
Easy	56.52%	13
Neither easy nor difficult	43.48%	10
Difficult	0.00%	0
TOTAL		23

Q4



Is your age and computing skills affecting your access to the virtual learning platform?

Answered: 23 Skipped: 1



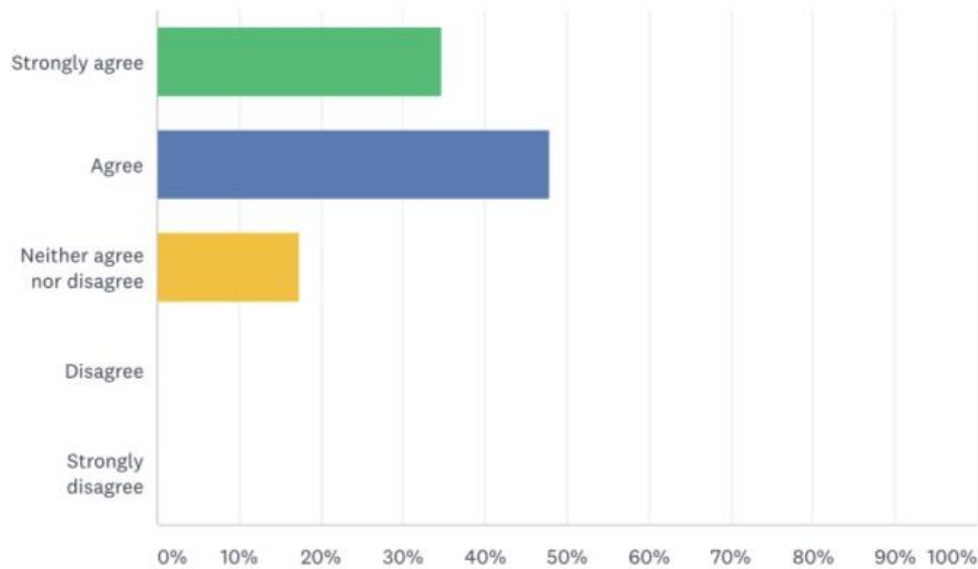
ANSWER CHOICES	RESPONSES	
A great deal	26.09%	6
A lot	21.74%	5
A moderate amount	0.00%	0
A little	17.39%	4
None at all	34.78%	8
TOTAL		23

Q5



Do you agree that learning through Moodle is increasing your interaction with lecturers, course content and other students?

Answered: 23 Skipped: 1

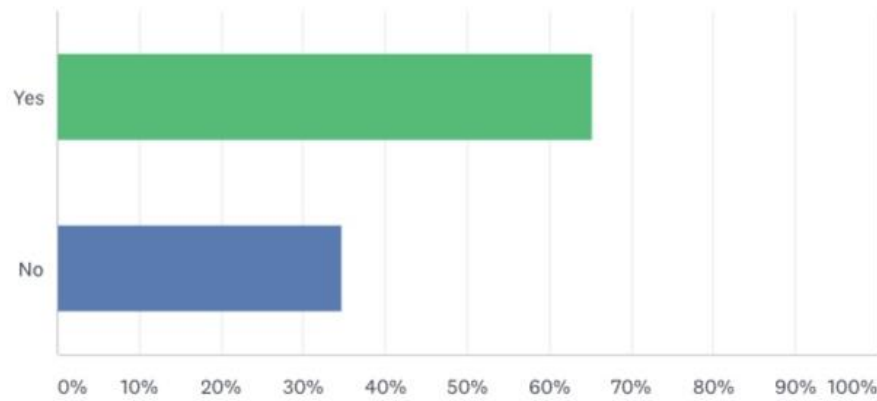


ANSWER CHOICES	RESPONSES	
Strongly agree	34.78%	8
Agree	47.83%	11
Neither agree nor disagree	17.39%	4
Disagree	0.00%	0
Strongly disagree	0.00%	0
TOTAL		23

Q6

Do you feel that using Moodle affects your motivation to learn?

Answered: 23 Skipped: 1



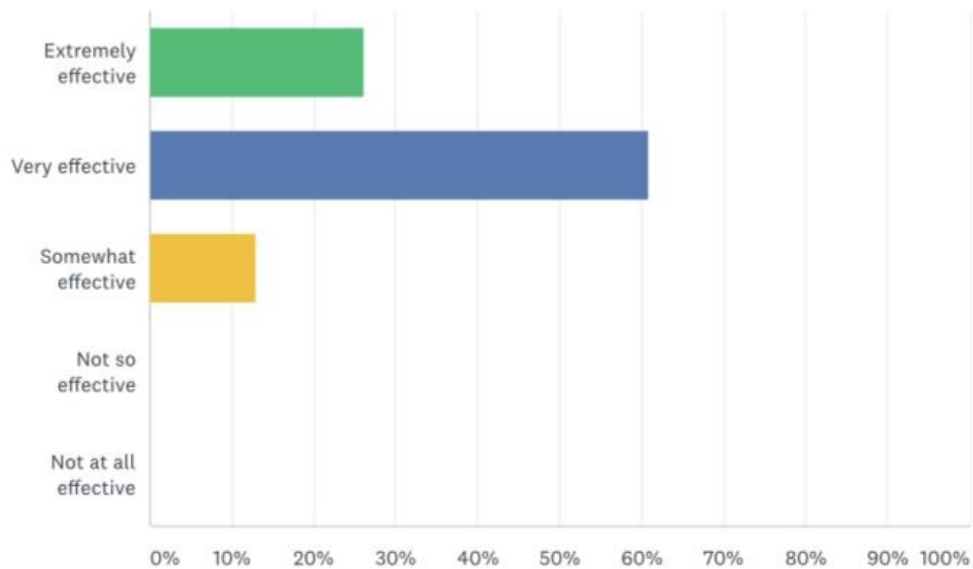
ANSWER CHOICES	RESPONSES	
Yes	65.22%	15
No	34.78%	8
TOTAL		23

Q7



Compared to in class learning, how effective is learning through Moodle?

Answered: 23 Skipped: 1



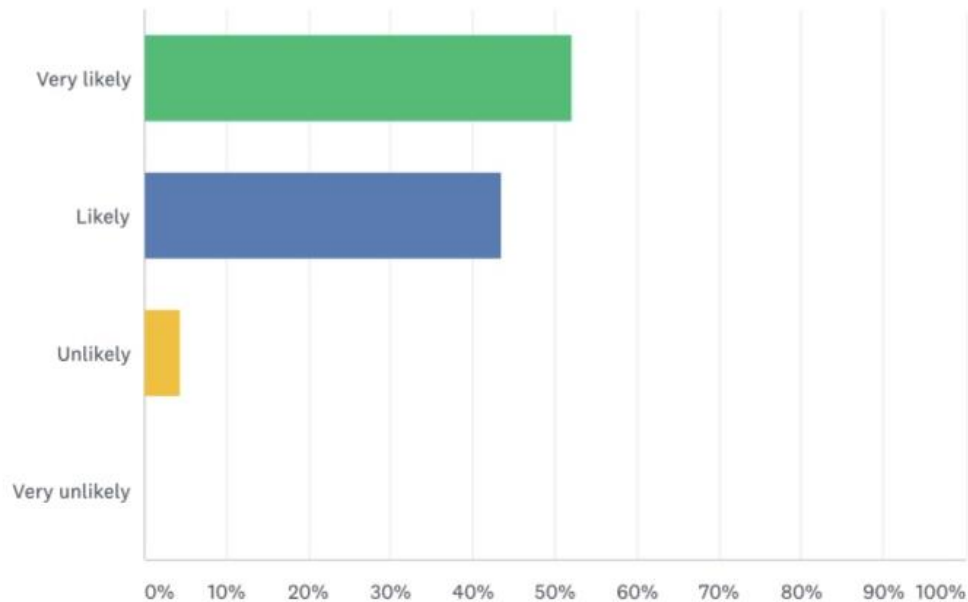
ANSWER CHOICES	RESPONSES	
Extremely effective	26.09%	6
Very effective	60.87%	14
Somewhat effective	13.04%	3
Not so effective	0.00%	0
Not at all effective	0.00%	0
TOTAL		23

Q8



How likely are you to choose the virtual learning over classroom learning?

Answered: 23 Skipped: 1



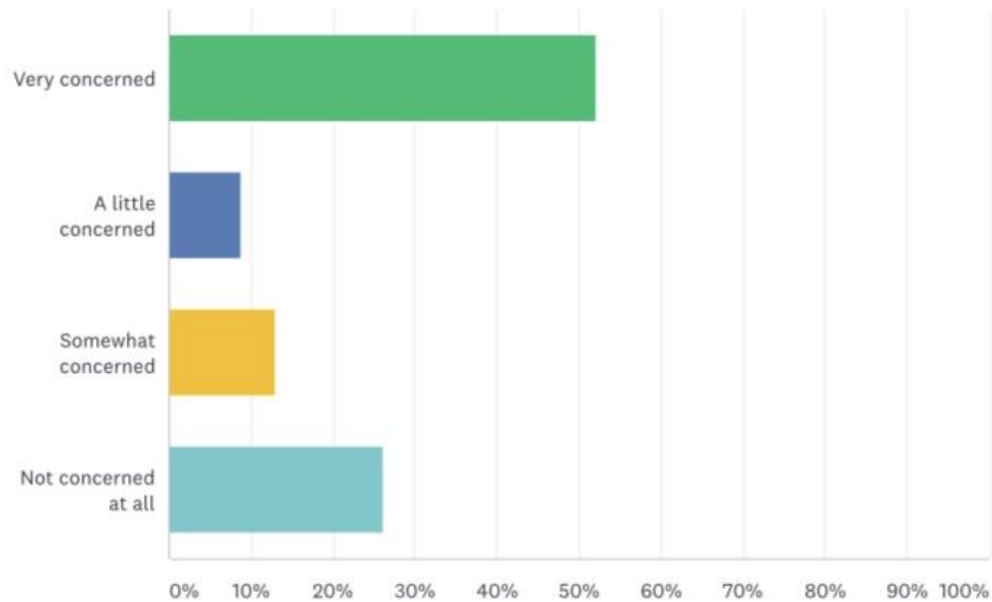
ANSWER CHOICES	RESPONSES	
Very likely	52.17%	12
Likely	43.48%	10
Unlikely	4.35%	1
Very unlikely	0.00%	0
TOTAL		23

Q9



Are you concerned about security threats when using Moodle?

Answered: 23 Skipped: 1



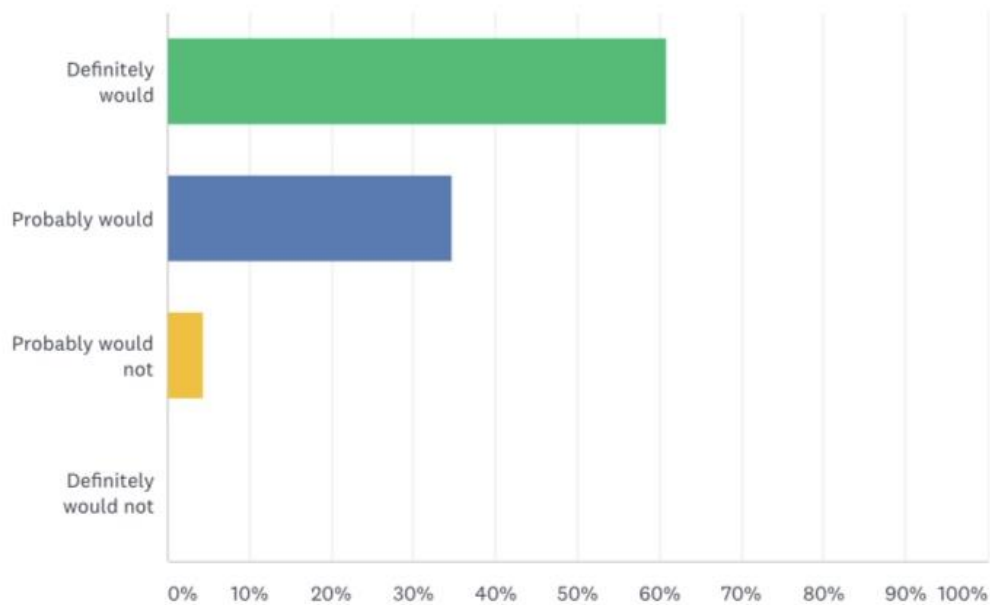
ANSWER CHOICES	RESPONSES	
Very concerned	52.17%	12
A little concerned	8.70%	2
Somewhat concerned	13.04%	3
Not concerned at all	26.09%	6
TOTAL		23

Q10



Considering your experience, would you recommend Moodle to others?

Answered: 23 Skipped: 1



ANSWER CHOICES	RESPONSES	
Definitely would	60.87%	14
Probably would	34.78%	8
Probably would not	4.35%	1
Definitely would not	0.00%	0
TOTAL		23

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