

REPORT

IMPACT OF VIRTUAL LEARNING ENVIRONMENTS
(MOODLE) ON STUDENTS' LEARNING EXPERIENCE
AT THE UWTSD LONDON CAMPUS

Digital Skills and Research Methods (BMSW4003)

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INTRODUCTION

Virtual Learning Environments is a very important and inevitable process for the learning of the students. It has enabled both learners and instructors to improve the process of teaching. In this research, the impact of VLE and especially Moodle will be analysed on the learning process of the students of UWSTD. There is various positive effect which has been made by virtual learning on student learning. On the other side, VLE is also helping the teachers to improve the teaching process effectively. In this research, the overall impact of VLE on independent learning will be analysed along with finding the level of students' motivation.

BACKGROUND LITERATURE

Importance of virtual learning

The process of virtual learning is administered through several technology to use web platform as the form and process of learning. Here, virtual learning environment can be effective in various process. There are a lot of advantages that can be retrieved from the aspects of virtual learning in various ways. Lopukhova and Makeeva (2017), stated that the benefits can be viewed from the side of both learners and teachers. For the learners, on the other side, online or virtual learning can be able to improve the process of learning. It will be increasing the amount of learning because the e-learning environment can provide with extra time to learn about new things.

As the result of it, learner can easily achieve wider amount of knowledge. Following this, the online learning or web platform is successful at reducing the cost of operations. According to Boulton et al. (2018), because of reduced operational cost, the fees of online courses can be usually lower than others. So, in this way, cost of the courses can easily be reduced. As the opportunities are provided with the online materials and sources, it is becoming able to bring the flexibility in greater manner. As the result of it, wider flexibility in the learning process is being managed and achieved. There are also some advantages that are being managed from the view of course instructors.

By using virtual learning, any instructor can be successful at accessing into several excellent resources. All of these resources are supporting to create an effective learning process and system. In this way, instructors are being able to pass the knowledge about a topic in an easy manner. Following this, instructors can improve the overall passion of learners toward the learning too. As Huda et al. (2017) stated, in the online platform, there can be various process of presenting the materials such as videos, slide and so on. As the result of having flexible time management, instructors can be successful at managing the time in different processes.

So, in this way, both learners and instructors are being positively influenced by the virtual learning method.

Techniques of virtual learning

There are various techniques available which will improve and accelerate the system of virtual learning. There are actually three types of virtual learning techniques that start with asynchronous platform. Here, as Annansingh, (2019) stated, asynchronous technique is made of the self-paced programs and actually independent. So, all the materials of this course will be accessed by the learner for a certain time. The materials will be accessible within 24 hours a day and 7 days a week. It is being able to use through the multiple devices. So, these multiple devices will increase the accessibility in several manner. However, these types of learning procedures are not very much interactive.

As the result of it, asynchronous learning is perfect when a learner is trying to learn something on a self-guided process. On the other side, synchronous process of virtual learning takes place on the online platform in an interactive manner. This kind of technique is used for the real time application with the usage of virtual classroom, seminar, and so on. Yang et al., (2018) think that there will be various advantages and disadvantages related with this process. In the synchronous process, the learning process works just like the classroom. However, it is also including the mechanism of providing with different materials in the interactive class process.

In this process, the class becomes very much interactive and it makes the whole learning process even more vivid. In the similar way, it actually doesn't provide with the chances of gaining access to the materials in future. As the result of it, the overall process may get influenced in various manner. After that, there will be hybrid and blended process which will be consisting of synchronous and asynchronous aspects. By using the hybrid process, both real

time class and access to the materials will be provided (Martin and Bolliger, 2018). This process will give the interactive situation along with access to the required resources.

However, in most of the cases, this kind of infrastructure is more costly than the others. So, even in UWSTD, this hybrid process is being used for the learning of the students.

Design of research

Refer to Appendix 1 - Questionnaire

This research was carried through secondary and primary research method. In this place, the secondary data was collected through the literature review. Following this, the primary method of research was administered through the questionnaire method. Here, the questionnaire was given to 21 students and they have provided with the information. On the other side, quantitative and qualitative method of research have also been used. Quantitative method has brought numerical data where qualitative method was used by using the theoretical matter (Mohajan, 2018). In this way, the research has been designed.

AIMS AND OBJECTIVES

In this report, there are several objectives. Based on these objectives, total research will be carried and administered. Here, the aims and objectives are:

1. To identify the positive effect made by virtual learning on student learning,
2. To find the process of using VLE help in teaching process,
3. To find the impact of VLE on independent learning and to understand whether VLE can increase the students' motivation or not.

METHODOLOGY

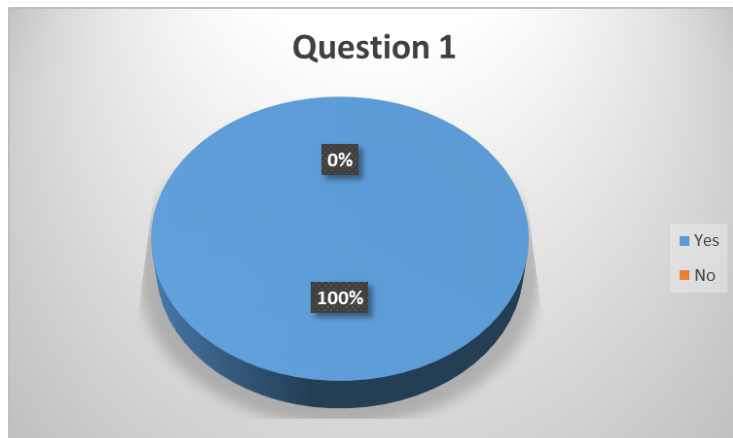
In order to fulfil this research, a specific aspect of methodology has been used. As the result of it, the research method of quantitative and qualitative method of data collection is being used. Here, both quantitative and qualitative method have been used in this process. The quantitative method of research has been used to make the numerical analysis. On the other side, the numerical analysis will be supported by the theoretical application. The theoretical analysis of the data will support the numerical analysis (Kumar, 2019). Quantitative method has brought numerical data where qualitative method was used by using the theoretical matter in this research.

Apart from that, the primary and secondary data have also been collected from the research. Primary research is used to collect and bring the data from the total population of the project (Mohajan, 2018). Here, the population was the students of a class of UWSTD. In this case, questionnaire and survey method have been used to collect the primary data. As form of population and sample, the data has been collected from whole 21 peoples. The number of populations was lower, and this is why, data has been collected from all of them. On the other side, several literatures have been reviewed in the process of collecting and managing the secondary data.

In the literature review, the importance of virtual learning along with the techniques has been stated. So, these are the key methods that have been applied throughout the whole process of research.

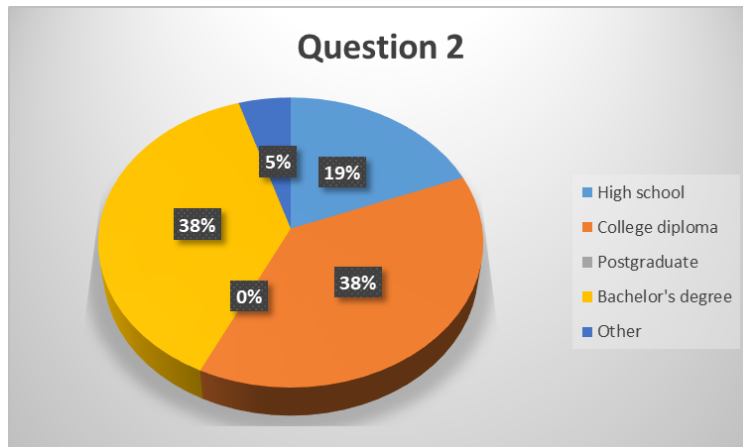
RESULTS

Question 1: Are you attending/have you attended the university?



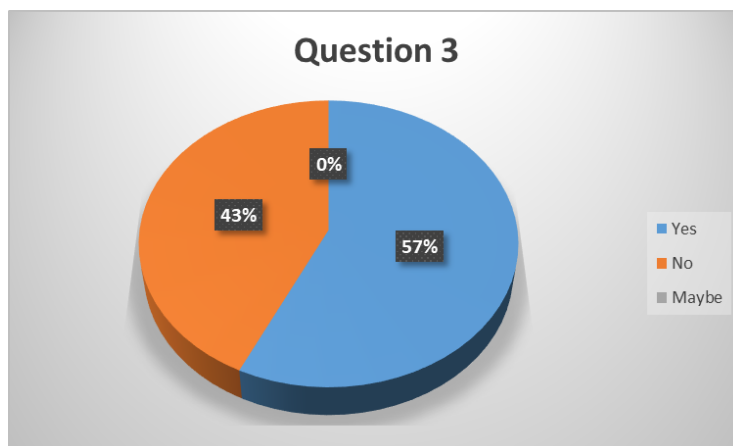
So, 100% respondents have agreed where no one has disagreed.

Question 2: What is your highest qualification?



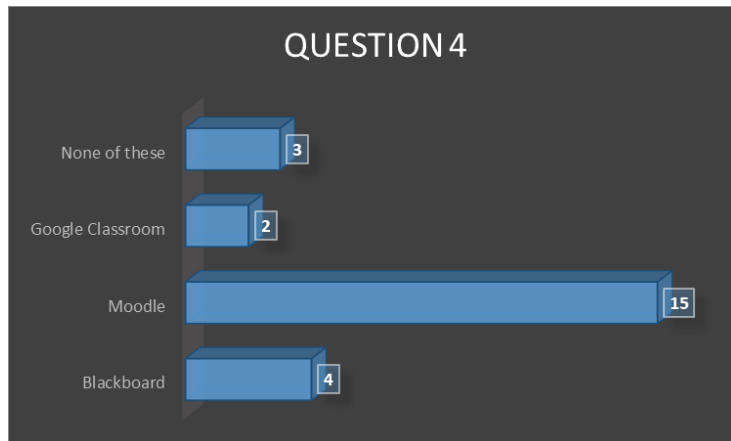
While respondents were asked about their highest qualification, 38% have replied that they had college diploma where another 38% have replied that they had bachelor's degree. On the other side, 19% have mentioned that their qualification was up to high school.

Question 3: Have you previously participated in Virtual Learning?



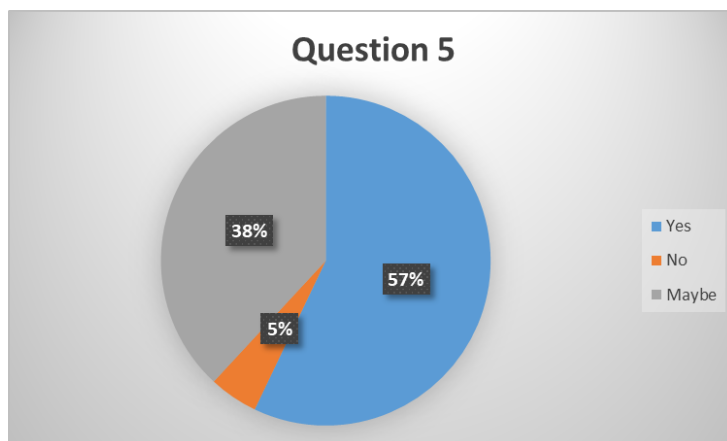
After that, they were asked if they have participated in such learning or not. So, 57% of respondents had replied affirmatively where the result replied negatively.

Question 4: Have you ever used any of the following Learning Management System?



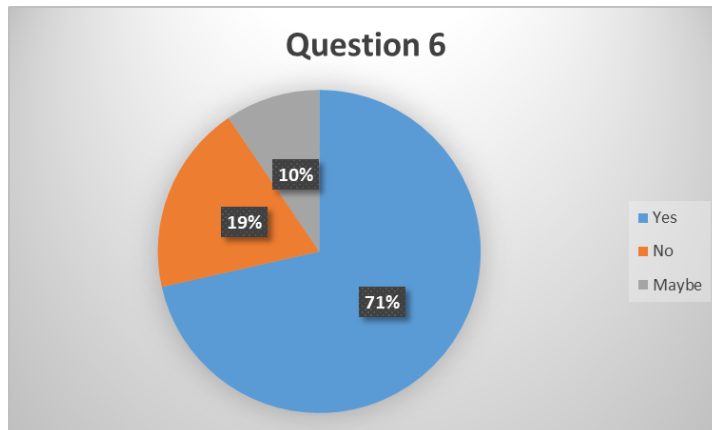
Following this, respondents were asked if they have used the learning management system such Moodle, Blackboard, and Google Classroom. 15 respondents have used Moodle, where 2 have used google classroom with 4 using the blackboard. Only, 3 of them have not used any of the methods.

Question 5: Do you feel confident about your computing skills?



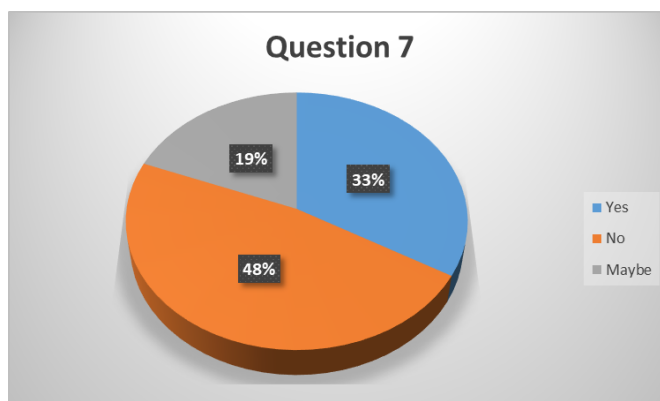
When respondents were asked about their computing skills, 57% of respondents have mentioned that they were confident. On the other side, 5% have displayed their dwindling viewpoint.

Question 6: Do you feel happy to communicate digitally?



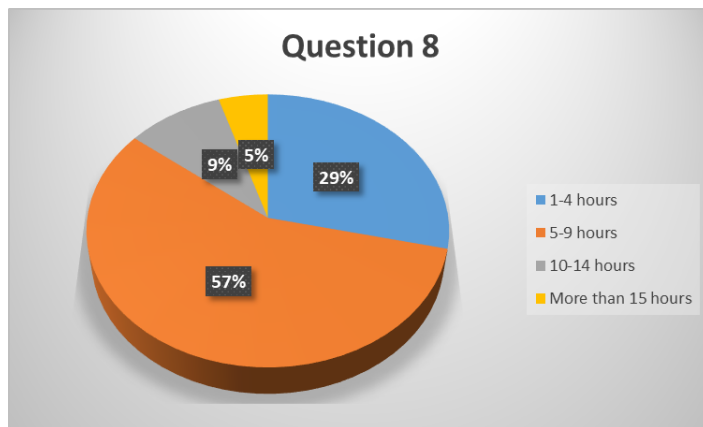
In terms of digital communication, 71% of respondents have expressed their satisfaction. However, 19% have stated that they are not actually happy with the digital communication.

Question 7: Are you able to complete online course without teachers supports?



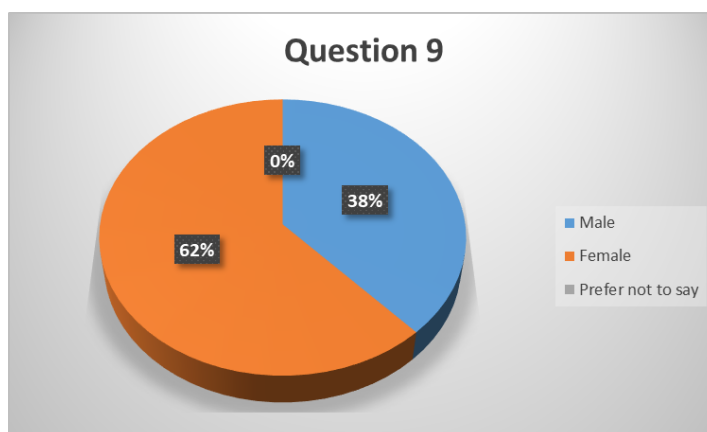
After that, respondents were asked if the online course is possible to be completed without the support of teachers. 48% of the respondents have replied that teachers' support is mandatory where 33% of them have replied in different way.

Question 8: How many hours per week do you spend on online education using computer/laptop?



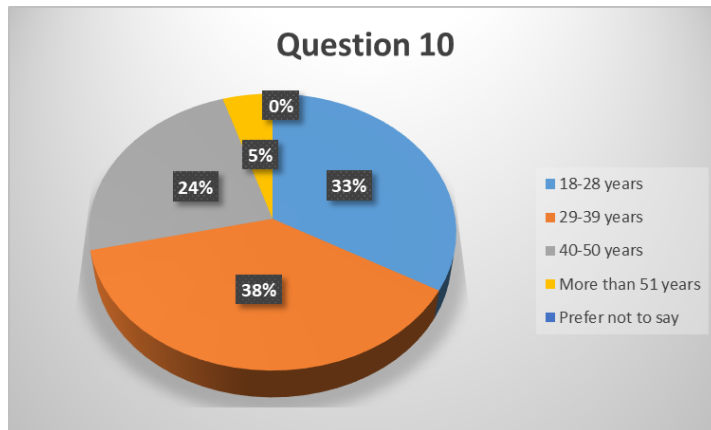
In terms of time spent with computer or laptop, 57% of the respondents have inferred that 5-9 hours per weeks are being spent on the online learning. 29% of the respondents have mentioned that they are spending 1-4 hours on weekly basis.

Question 9: Are you...?



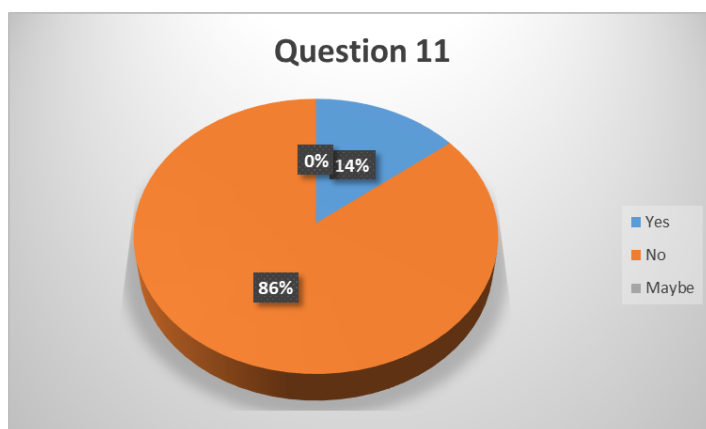
62% were female where 38% were male.

Question 10: How old are you?



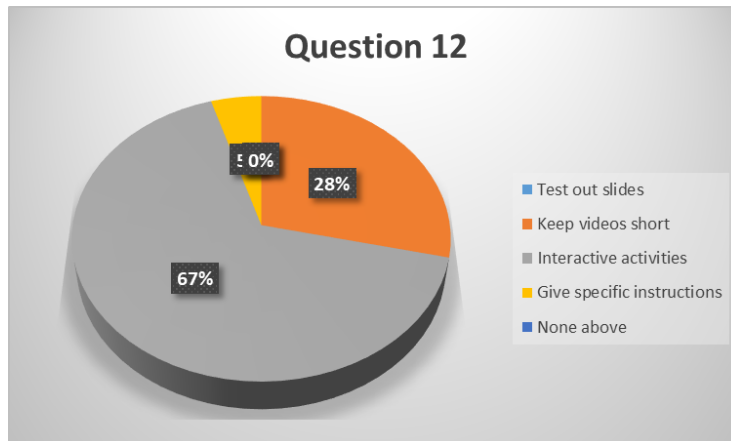
38% of the respondents were aged between 29 and 39 years. On the other side, 33% of the respondents were aged between 18 and 28 years. 24% of them were between 40 and 50 years.

Question 11: Do you think learning face-to-face in class is the same as learning online?



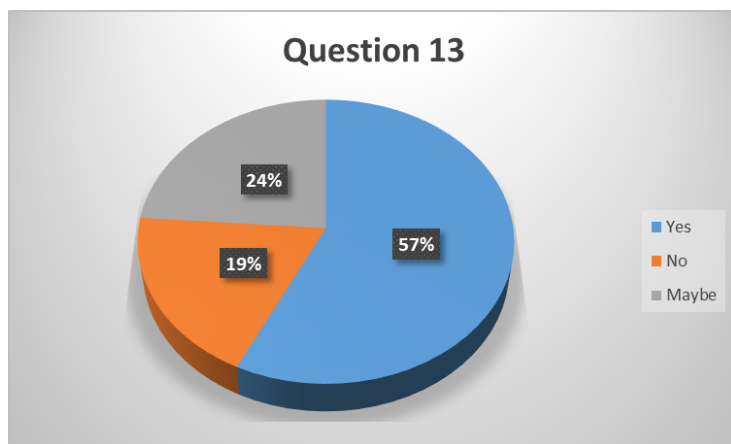
86% of the respondents have mentioned that face to face class is not same as learning online where 14% have replied in different manner.

Question 12: How to make online learning more interesting and effective?



To improve the online teaching method, 67% of the respondents have suggested the interactive activities. 28% of the respondents have also supported to keep the videos short and informative.

Question 13: Would you recommend online studying to another student/friend?



In terms of recommendation, 57% of the respondents have mentioned that they will recommend the online study to others where 19% have denied.

DISCUSSION

Refer to appendix 2 – Data collection in Excel Table

So, from the analysis, it has been seen that Moodle can be successful at improving the process of student learning along with motivation of learning. By using this information, teachers can also be successful at improving the learning quality through the VLE application. These are

making positive impact on the learning process of the students. For the learners, online or virtual learning can be able to improve the process of learning. In the similar way, it is increasing the accessibility of the students to the knowledge (Hlosta et al., 2018). Because of reduced operational cost, the fees of online courses can be usually lower than others.

As the result of it, positive impact is being made on the process of student learning by the application of virtual learning. Instructors are also being positively influenced by the administration of the virtual learning. By using the virtual learning process, any instructor can be successful at accessing into several excellent resources. In the online platform, there can be various process of presenting the materials such as videos, slide, and so on. In the similar process, it is also being able to increase the proper prospects of time management (Foster et al., 2018). In this way, instructors are also being able to improve their teaching quality in various ways.

From the survey, it has been seen that learners are enrolling into the online platform for the higher education only. Because of having flexible opportunities of attending classes, learners are being more focused to go with this learning. On the other side, most of the respondents think that online learning is not same as the face to face class. In the face to face class, the interaction process becomes possible. However, the online learning is not only fulfilling the attribute of interaction but also providing with the chance of better knowledge circulation and flexibility of time management (Cohen and Sasson, 2016).

As the result of it, virtual learning process is being able to motivate the learners in different ways. If the virtual learning process is interactive, it will be increasing the motivation of the learners in different ways. So, most of the learners have suggested that the virtual learning process must be even more motivated (Hlosta et al., 2018). Because of using laptop and computer on regular manner, learners are now being even more interactive with the online course. As they are being able to focus on flexible timing, they are even more motivated toward the online learning. In this way, it is supporting to improve the motivation of learners.

CONCLUSION

Virtual learning environment can be effective in various process of learning and teaching methods. It has been increasing the chances of learning because the e-learning environment can provide with extra time to learn about new things. As the result of it, wider flexibility in the learning process is being managed and achieved. So, both learners and instructors are being positively influenced by the virtual learning method.

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APPENDIX

Appendix 1

Questionnaire, Nataliya Virych-1909127

VLE among students UWTSD

The purpose of this questionnaire tends to seek the student's approach towards this teaching method, as well as its grade of popularity and effectiveness among them.

1. Are you attending/have you attended the university?
Yes
No
2. What is your highest qualification?
High school
College Diploma
Postgraduate Degree
Bachelor's Degree
Other
3. Have you previously participated in Virtual Learning?
Yes
No
Maybe
4. Have you ever used any of the following Learning Management System?
Blackboard
Moodle
Google Classroom
None above
5. Do you feel confident about your computing skills?
Yes
No
Maybe
6. Do you feel happy to communicate digitally?
Strong agree
Agree
Disagree
Strong disagree
7. Are you able to complete online course without teacher support?
Yes
No
Maybe

8. How many hours per week do you spend on online education using computer/laptop?
- 1-4 hours
 - 5-9 hours
 - 10-14 hours
 - More than 15 hours
9. Are you...?
- Male
 - Female
 - Prefer not to say
10. How old are you?
- 18-28
 - 29-39
 - 40-50
 - More than 51
 - Prefer not to say
11. Do you think learning face-to-face in class is the same as learning online?
- Yes
 - No
 - Maybe
12. How to make online learning more interesting and effective?
- Test out slides
 - Keep videos short
 - Provide interactive activities
 - Give specific instructions
 - None above
13. Would you recommend online studying to another student/friend?
- Yes
 - No
 - Maybe

Appendix 2

Data collection in Excel Table

