



THE IMPACT OF A VIRTUAL LEARNING ENVIRONMENT ON THE STUDENTS LEARNING EXPERIENCE AT UNIVERSITY OF WALES TRINITY SAINT DAVID LONDON CAMPUS

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Introduction

This report is based on the relationship between the use of virtual learning environments and students' experience. A virtual learning environment is an online platform that delivers educational material to students. I will conduct primary research by using a questionnaire to ask students about their virtual learning experience. A sample of 15 students from the University of Wales Trinity Saint David London campus will be asked to take part in this survey.

In addition, I will examine details and elements of secondary sources. The result of my findings will be shown by using bar graphs, pie charts and line graphs. These results will be analyzed and summarized to give a better outlook of how effective a virtual learning environment is.

Rationale

This research is being carried out to highlight the positive and negative aspects as well as the impacts a virtual learning environment has on the students of the University of Wales Trinity Saint David London campus.

Research Objectives

The aim of this project is to obtain indicators of challenge's students are facing by using a virtual learning environment. By knowing these challenges, a response can be outlined by developing strategies to implement necessary actions to meet students' interest and needs.

Review of Existing Literatures:

The impact of a Virtual Learning Environment

A research about the influences of virtual learning on students' performance found that "Online students have different approaches to learning and this has a reflection on different uses of the virtual learning environment. Within the virtual learning environment students can click to learn, read a file, take notes, print or save in the computer for further offline use" (Alves, Miranda & Morais, 2017). It was also shown in another study about increasing student engagement with virtual learning environments that "Students valued the virtual learning environment because of the distribution and availability of notes and the ability to submit assignments online" (Tobin, 2016). Another research based on virtual learning environments benefits found that "a virtual learning environment helps students to engage in a personalized education and it can greatly improve the way learning materials are delivered" (Beek, 2012). "Virtual learning seemed to significantly improve student's satisfaction, engagement and recall" (Ryan & Poole, 2019), a study on the impact of virtual learning environments on students' satisfaction, engagement, recall and retention showed. A research on learning effectiveness in a web-based virtual learning environment found that "students learning basic IT skills in a virtual learning environment have better learning effectiveness than their counterparts in traditional classrooms" (Chou & Liu, 2005).

In summary, virtual learning environments possess a variety of research which outlines positive experiences in regard to students. It allows students to continue with their learning even when they are offline, it enhances their engagement and gives them a more effective learning experience.

Research Methodology

Qualitative Research method: “Two broad approaches of data collection and interpretation in research are Qualitative and Quantitative research. Qualitative research method is used to understand people’s belief, experiences, attitudes, behaviors and interactions. It generates non numerical data” (Pathak, Jena & Kalia, 2013).

Quantitative Research: “This approach is used when one begins with a theory and tests for confirmation or disconfirmation of that hypothesis” (Newman & Ridenour, 1998).

I will use both qualitative and quantitative research methods to gather my information for this report. “Used in combination, qualitative methods can help improve the accuracy and relevance of quantitative studies by increasing our understanding of the creation of quantitative data” (Black, 1994).

Qualitative research will include using a survey to collect information from students at the University of Wales Trinity Saint David London campus. I will be able to understand the experience of the population regarding the use of a virtual learning environment.

Quantitative research will include using graphs and charts to gain a better understanding of the percentage of the population relating to the information that I have gathered from my survey.

Population: “The population of interest is the study’s target population that it intends to study. It is often not feasible to recruit the entire population of interest. Instead, the investigators will recruit a sample from the population of interest to include in their study” (Majid, 2018).

This study will apply its research to a sample of a target population.

Sample and sample size: “Sample size is a count of individual samples in any statistical settings such as an opinion survey. Though a relatively straightforward

concept, choice of sample size is a critical determination for a project. Too small a sample yields unreliable results while an overly large sample demands a good deal of time and resources” (Zamboni, 2018).

Data Collection Process:

“Data collection is a methodical process of gathering and analyzing specific information to proffer solutions to relevant questions and evaluate results. The key reasons for collecting data is to ensure that the integrity of the research question is maintained, to reduce the likelihood of errors, to minimize the risk of errors in decision making, to save the researcher time and funds and for the introduction of new information. The core form in which data can be collected are primary and secondary data” (Formplus, 2020).

Primary Data: “Primary data collection is the gathering of raw data collected from the source” (Formplus, 2020).

Secondary Data: “Secondary data collection is referred to as the gathering of second-hand data collected by an individual who is not the original user. It is the process of collecting data that is already existing” (Formplus, 2020).

To collect data for this research I will conduct a survey by using a questionnaire to ask students of the University of Wales Trinity Saint David London campus about their experience of using moodle. This questionnaire will consist of 9 nine questions, 3 of which will be open ended questions. “Open-ended questions are questions that cannot be answered with a simple yes or no, and instead require the respondent to elaborate on their points. Open ended questions help you see things from a customer’s perspective as you get feedback in their own words” (Dossetto, 2020). These open-ended questions will help me to understand how students' learning has been influenced and highlight any negative outcomes in

order to find solutions that can meet students' expectations. Due to the current crisis of covid 19 the questionnaire will be distributed to students by email and social media only.

Ethics in data collection:

"The highest ethical standards must be upheld when collecting data and the research plan must describe the measures that will be taken to protect the participants involved" (Danvers & Desai, 2008). During my data collection process, I was always honest and kept the participants personal information confidential and did not share with any third party. I also received permission and approval from the university of wales trinity saint david to conduct this research.

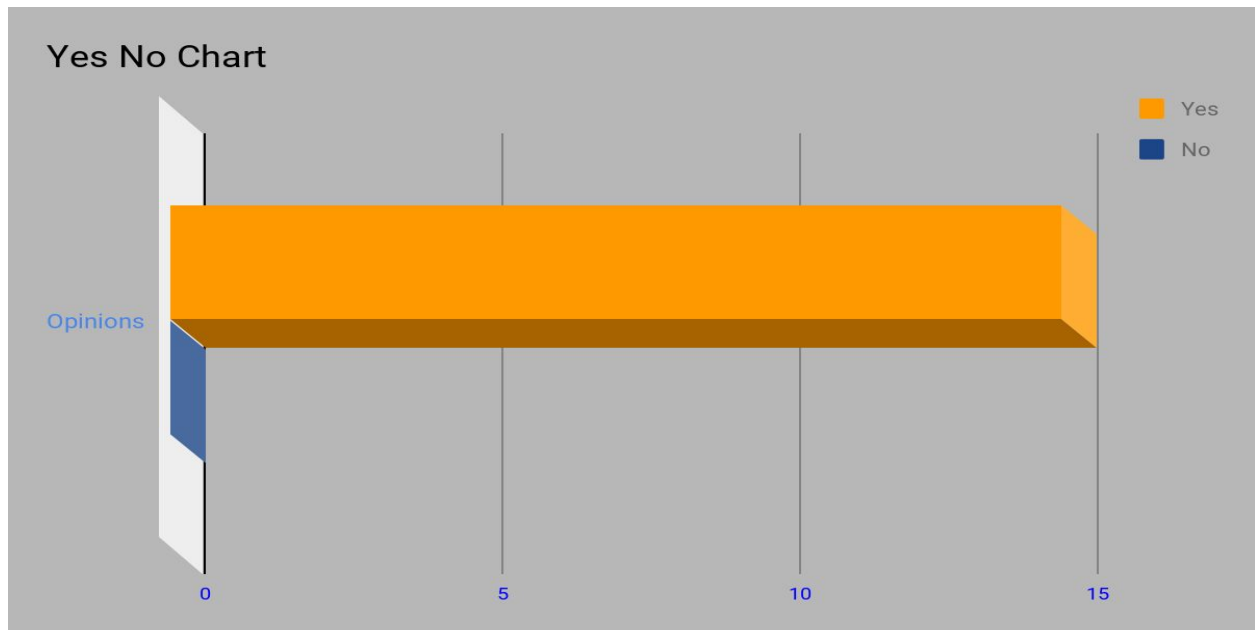
Findings, Analysis and Discussion:

A questionnaire was used to collect data from a sample of 15 students at the University of Wales Trinity Saint David London campus about their experience of using moodle. The results from this research will be presented below in the form of bar charts, pie charts and line graphs.

The impact of the Virtual learning environment on students' learning experience questionnaire.

1. Have you had any experience using moodle?

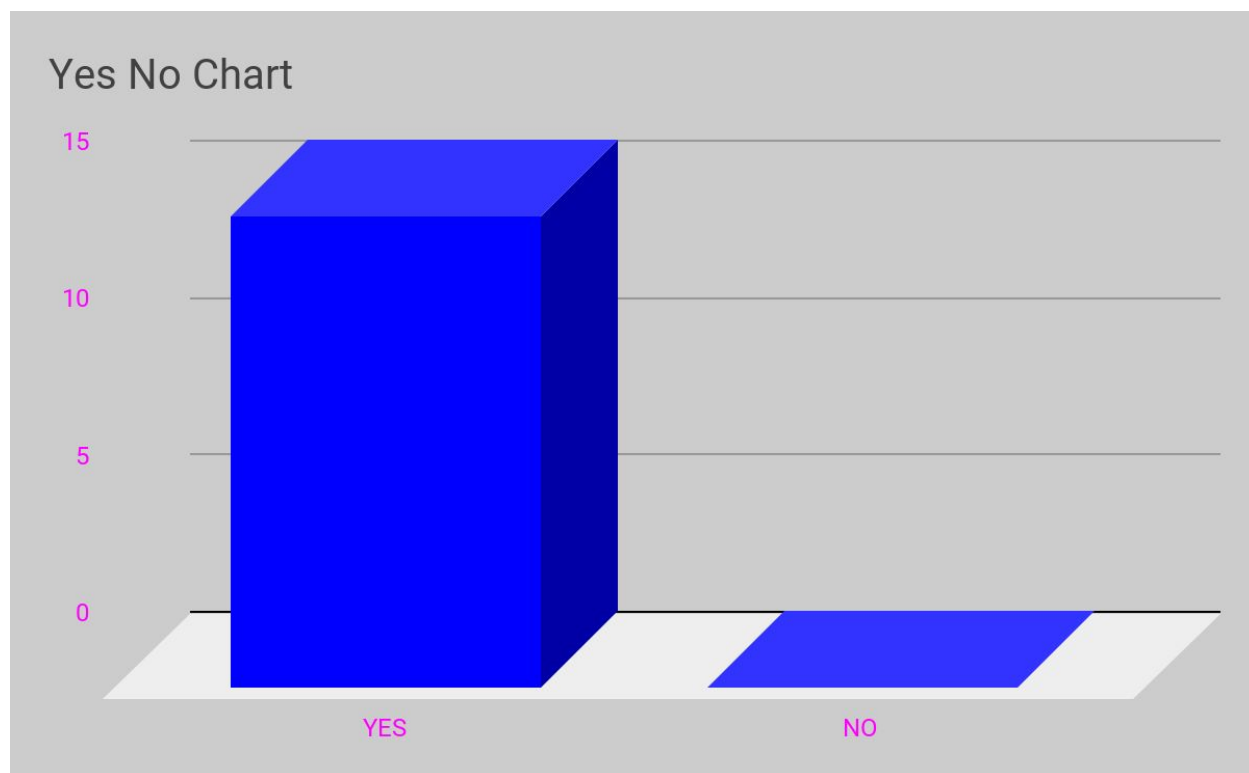
YES	NO
15	0



Q1). Graph Analysis: The bar graph above shows that all 15 students that took part in the survey had used moodle before.

2.Has your learning been benefiting through the use of moodle?

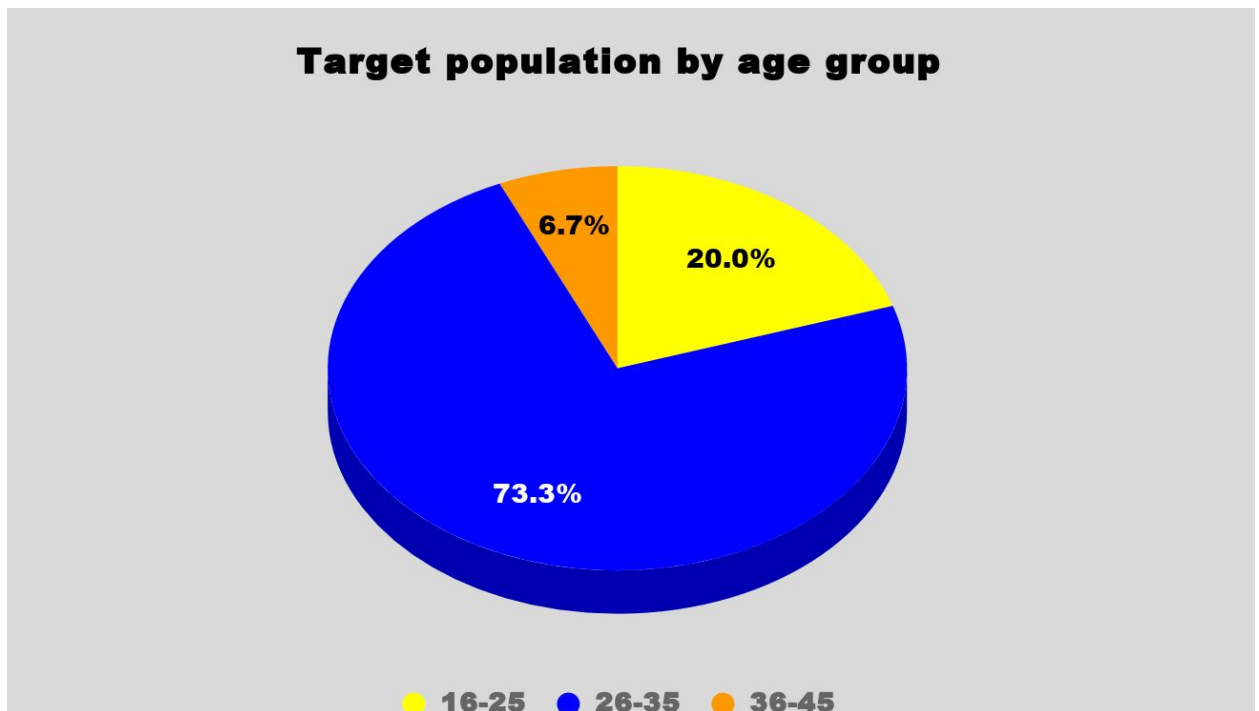
YES	NO
15	0



Q2. Graph Analysis: The bar chart above shows that all 15 students stated that their learning benefited while using moodle.

3. What age group do you belong to?

16 - 25	26 - 35	36 - 45	46 -55	55 and over
3	11	1	0	0

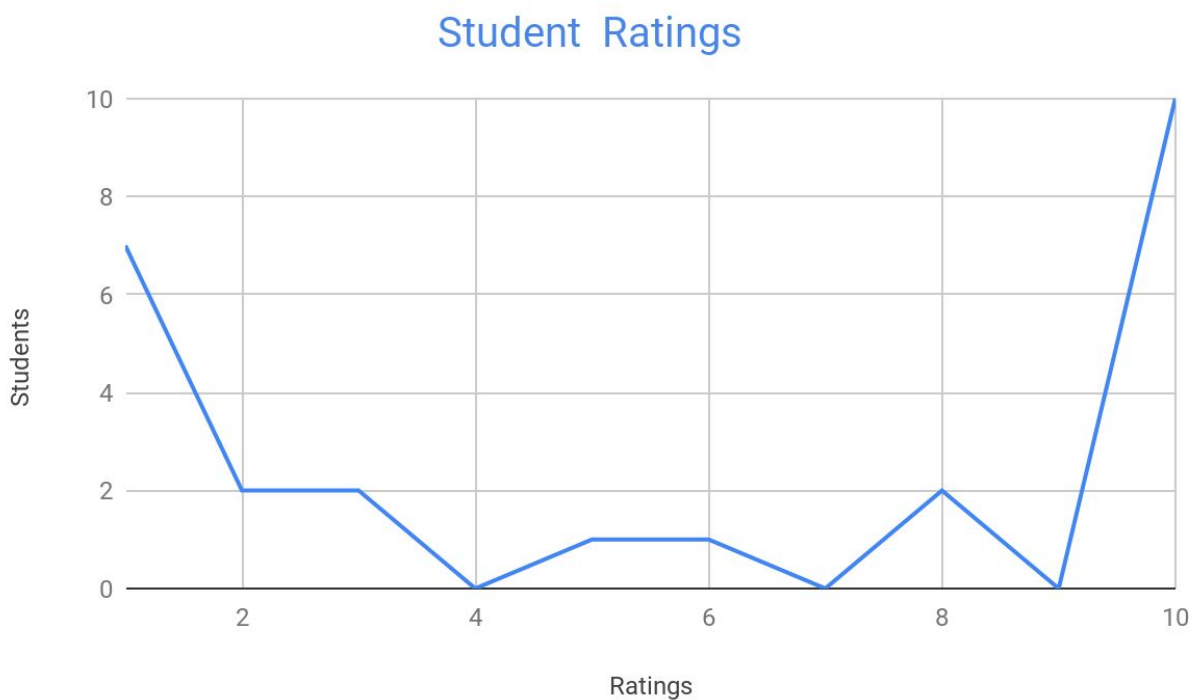


Q3. Graph Analysis: 73.3% of the target population was aged between 26-35, whilst 20% was in the age group of 16-25 and 6.7% was between age 36-45.

4. On a scale of 1-10, how would you rate the interaction between teachers and students while learning through Moodle? 1 being the least amount and 10 being the most amount.

RATINGS

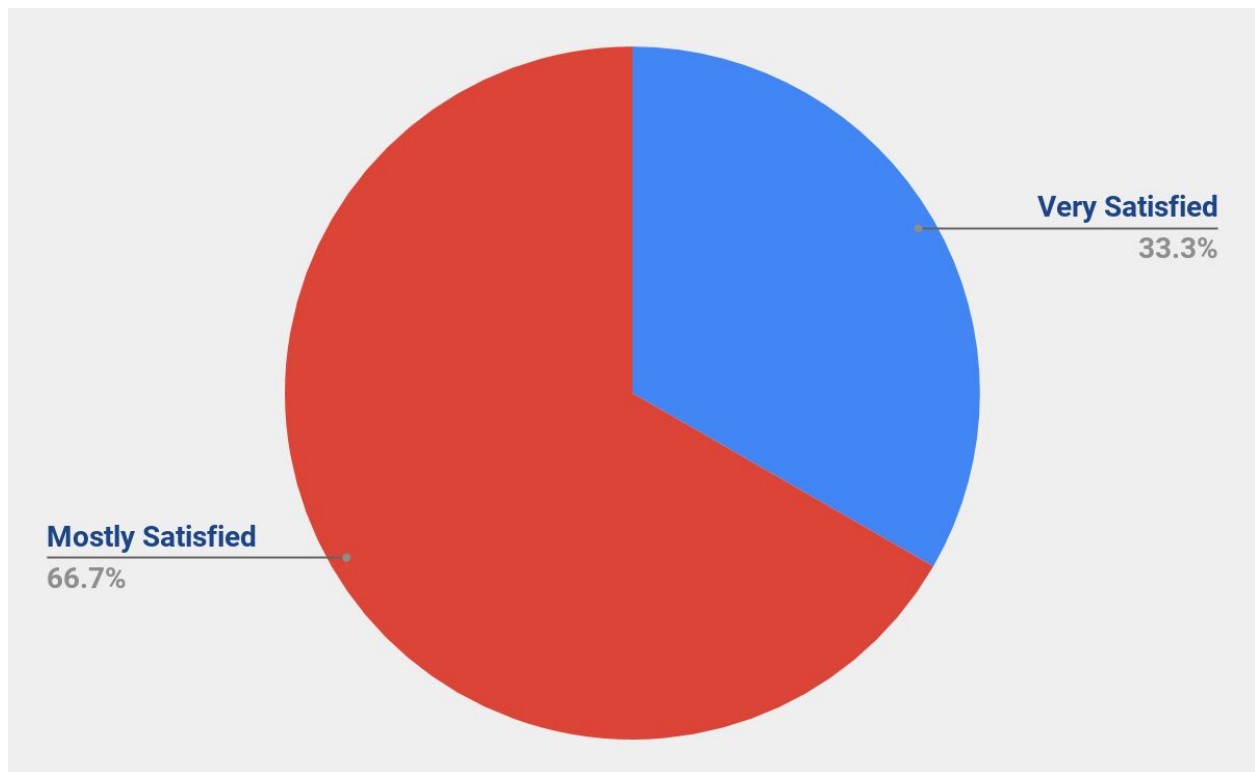
1	2	3	4	5	6	7	8	9	10
7	2	2	0	1	1	0	2	0	0



Q4. Graph Analysis: The line graph above illustrates the ratings of how students felt about their interaction with teachers while learning through moodle, 1 being the least amount of interaction and 10 being the most amount. 7 students rated **1**, 2 students rated **2**, another 2 students rated **3**, while 1 student rated **5**, another 1 student rated **6** and the final 2 students rated **8**.

5. How satisfied are you with the overall experience of Moodle?

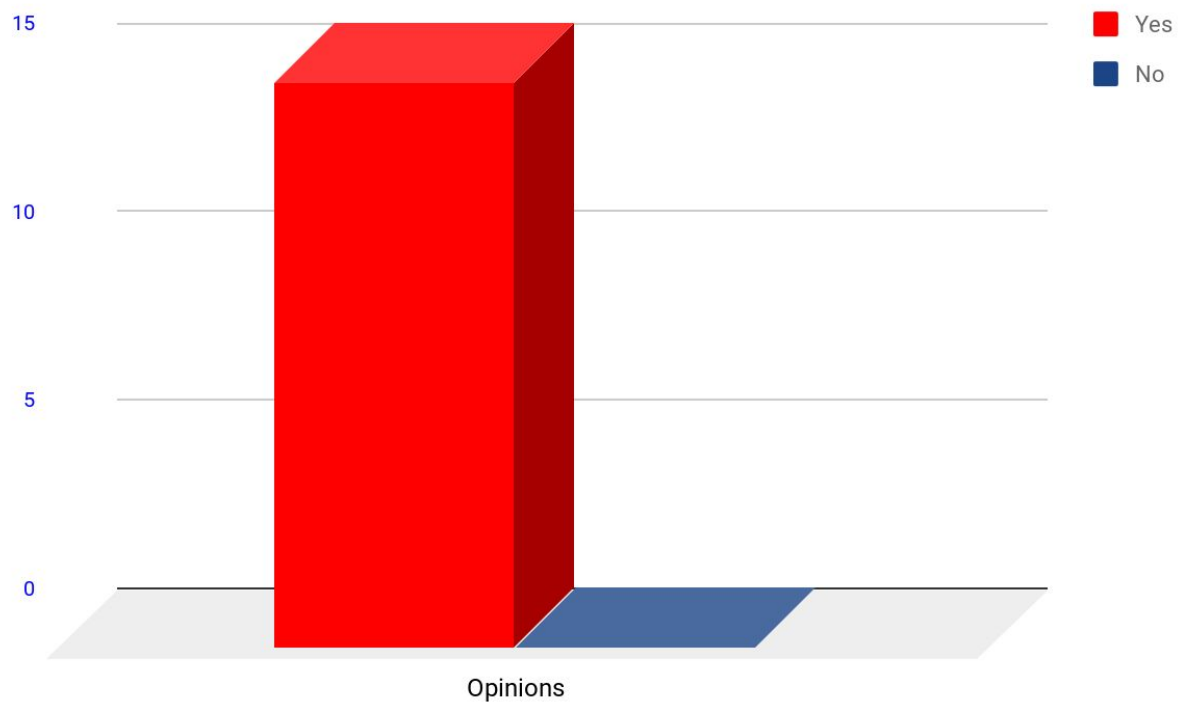
VERY SATISFIED	MOSTLY SATISFIED	NOT SATISFIED
5	10	0



Q5. Graph Analysis: The pie chart above shows that 66.7% of the population was mostly satisfied with their experience when using moodle, whilst 33.3% said they were very satisfied.

6. Would you recommend Moodle to a friend?

YES	NO
15	0



Q6. Graph Analysis: The bar graph above represents students' feelings about recommending moodle to a friend. All 15 students answered yes to the recommendation of moodle.

7. What have been the advantages of learning through moodle?

Discussion: The majority of students implied that they found moodle to be convenient and easy to use, whilst a small proportion said they learned new technological skills from using moodle.

8. What have been the disadvantages of learning through moodle?

Discussion: The majority of students implied that they got distracted easily by household members and the connection at times is really bad. A small portion of students said they found moodle difficult to operate.

9. What are some of the improvements that can be made?

Discussions: The majority of students suggested that everyone should be given a guide on how to use moodle while a small amount of students suggested that they would like to receive notifications when class begins and for more interaction to occur between teachers and students.

Conclusion:

A virtual learning environment can be considered as an improvement to face to face classrooms. A number of benefits gained from the use of this type of environment has not only contributed to pupils learning but also to their personal characteristics. Empirical research found that the virtual environment for learning made positive impacts on students' learning, it helped them to engage more and improve their recollection as well as allowing them to contribute in their own learning. All these beneficial factors set the pace in pupils' motivation. Some may think that motivation is only needed while studying but it's a skill that will be greatly beneficial to a person in their personal and work life. My findings included that most of the students found that the positive aspects of using a virtual learning environment is that it's convenient and easy to use. With anywhere and anytime access pupils can ensure they are progressing with their learning.

Though a number of benefits have been highlighted, there are a few areas that need addressing. A direct focus needs to be pointed to the things that pupils find challenging when using this type of platform. The results from my research showed that most students implied that there was not enough interaction between teachers and students and that they got a lot of distractions from members of their household while learning through moodle. A few stated that they found this type of learning environment difficult to operate. A deeper look at these negative impacts is recommended in order to develop solutions to meet the needs of the students so that they are able to excel more in their studies. The virtual learning environment is a thriving platform that is being used more and more everyday by educational institutions, therefore it is vital to put the utmost efforts in building a strong and durable platform for all pupils to be able to receive all the essential elements required for them to succeed in their learning.

Recommendations:

Teachers need to develop a action plan outlined with the necessary steps that they will take to ensure that there is more interaction between teachers and students while using the virtual platform for learning.

The educational setting should encourage the students that are being distracted by members of their household while learning, to contact them so that they can work together to create a solution that can assist in meeting the needs of the student.

An introductory session which illustrates a step by step guide on how to access all the features available in moodle should be implemented at the beginning of each term. It should be mandatory for all to attend, that way it will provide surety that every pupil is equipped with the knowledge to access any learning material that they may need.

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APPENDIX 1

In-Class exercise: Questionnaire Design

Student Name: Stephany Bennett-Grant____ Student ID: 1913503_____

Module Name: Digital Skills and Research Methods Term 2 Group: 11

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 end question.

Question 1: Have you had any experience using Moodle?

- Yes
- No

Question 2: Has your learning been benefiting through the use of Moodle?

- Yes
- No

Question 3: What age group do you belong to?

- 16-25
- 26-35
- 36-45
- 46-55
- 56 and over

Question 4: On a scale of 1-10, how would you rate the interaction between teachers and students while learning through Moodle? 1 being the least amount and 10 being the most amount.

Question 5: How satisfied are you with the overall experience of Moodle?

- Very Satisfied
- Mostly Satisfied
- Not Satisfied

Question 6: What have been the advantages of learning through Moodle?

Question 7: What have been the disadvantages of learning through Moodle?

Question 8: What are some of the improvements that can be made?

Question 9: Would you recommend Moodle to a friend?

- Yes
- No

APPENDIX 2

THE IMPACT OF VIRTUAL LEARNING ENVIRONMENT

NAME : STEPHANY BENNETT-GRANT ID NUMBER : 1913503

RESULTS ON A QUESTIONNAIRE ABOUT THE IMPACT OF VIRTUAL LEARNING ENVIRONMENT

SAMPLE SIZE : 15 STUDENTS

1. Have you had any experience using moodle?	
YES	15
NO	0

2. Has your learning been benefiting through the use of moodle ?	
YES	15
NO	0

3. What age group do you belong to ?	
16 - 25	3
26 - 35	11
36 - 45	1
46 - 55	0
55 and over	0

4. On a scale of 1-10, how would you rate the interaction between teachers and student while learning through moodle ?	
Ratings	Number of students
1	7
2	2
3	2
4	0
5	1
6	1
7	0
8	2
9	0
10	0

5. How satisfied are you with the overall experience of moodle ?	
Very Satisfied	5
Mostly Satisfied	10
Not Satisfied	0

6. What have been the advantages of learning through moodle ?	
Most students said that they found moodle to be convenient and easy to use. A few said they	

learned new technological skills.

7. What have been the disadvantages of learning through moodle ?

Most students said they got distracted by household members and the connection is not clear sometimes. A few said they found it difficult to use.

8. What are some of the improvements that can be made?

Most students suggested that pupils should be given a guide to use moodle. A few suggested to get a notification of when class begins and more teacher and student interaction.

9. Would you recommend moodle to a friend?

YES	15
NO	0

