

Digital Skills and Research Methods

Topic: Impacts of Virtual Learning Environment (VLE)- Moodle on students learning experience at the University of Wales Trinity Saint David London Campus

University Name: University of Wales Trinity Saint David



Student Name: Elena Simulete

Teacher's name: Terry Walcott

Student ID: 2030120

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Abstract

Information and communication technology has made a significant contribution in the field of education and to enhance the teaching and learning experiences of the students and the teachers of the Virtual Learning Experience (VLE). The VLE system of the teaching is used the high educational institutions to improve the learning experiences of the students. It was also seen that the students enjoy learning using VLE but there are also several challenges that have been identified in this study like problems of connectivity and fact that this method is time-consuming makes it challenging for the teachers as well as the students. In this study, the impact of Virtual Learning Experience (VLE) on the learning experiences of students of Unity of Wales Trinity Saint David London Campus have been assessed using the primary data collection method via a set of questionnaires.

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1.0. Introduction

Technological advancement and the growth of information and communication technology (ICT) brought in a lot of changes in the educational system and offered resources like VLE which was meant to enhance the learning experiences of the students. VLEs are the virtual spaces that are used by the teachers and the students for sharing their activities resources and communicate with each other. The VLE platform is used for teaching online courses to students. The idea of a virtual learning environment (VLE) is considered to be a dynamic process for the continuous evolution of the features and potentialities of digital technologies.

The introduction of VLE in the education system has facilitated the interaction and interrelation of the constant process of communication that has helped to enhance the learning experiences of the students. One of the major advantages of the VLE is that it makes the education system more flexible and accessible while being a time-consuming process which acts as one of the major disadvantages of VLE. To assess the benefits and experiences of the students of ***the University of Wales Trinity Saint David London Campus*** a study has been conducted where the primary and secondary data have been collected for better understanding the impact of VLE on the learning experiences of the students.

1.1. Aims and Objectives

The aim of this study is to find out the impact of the Virtual learning environment (VLEs) Moodle on the learning experiences of the students who are presently studying at the ***University of Wales Trinity Saint David London Campus***.

The main objectives of this research are:

- To evaluate the advantages and the challenges of VLE in the education system.
- To investigate the preferences of the students towards using VLE in the field of education.
- To understand the differences between traditional system of learning and the virtual learning environment (VLE).
- To identify the methods through which the challenges of VLE can be overcome.

2.0. Background of the study

The constant search for better ways of imparting education is one of the major concerns of all countries across the world. Therefore, for creating the best learning experiences for the students' much importance was given to the strategies of the information and communication technology. Hence, in order to improve and promote the experience of teaching and learning in the higher educational institutions, a platform for learning management was adopted by the institutions known as the Virtual Learning Environment (VLEs). This use of VLEs has been made by both distance learning education and on-site learning institutions. The implementation of the VLEs in the institutions of higher education is found to have a good impact on the learning process of the students.

The environment and the concept of learning are the multidimensional and dynamic concepts that emerge from the practices and new conceptions of education in the digital world. The distribution and production of content, assessment, and communication in the process of teaching and learning are considered to be one of the biggest potentialities of the VLEs. The Virtual learning environment (VLE) has great relevance in the promotion and support of formal education of the students. However, VLEs also support learning in informal environments. According to Alves *et al.*, (2017), from the perspective of pedagogy, the VLEs that are used in all the educational institutions have helped to boost the innovative experiences of the students. The VLEs are directed towards content distribution and production. To some extent, traditional teaching methods are replicated by the VLEs by practicing the distribution of notices, contents, online communication, and messages.

The use of a Virtual Learning environment (VLEs) has proven to be advantageous in a lot of ways. Virtual learning environments (VLEs) have become the standard features of the courses in higher education. It has also been assessed by Alves *et al.*, (2017), that VLEs help in the processing and obtaining a large quantity of data. The VLE helped the students to become passive to active learners. Active learning helps in promoting the ability of the students to think critically that is necessary for the transfer of knowledge that is classroom acquired (Ryan and Poole, 2019). The advancement of ICT helped the students to take a greater amount of responsibility for their personal learning which made them the consumers and the creators of technology. All these advantages were one of the primary reasons for the changes that were brought in the traditional system of learning. Various components are provided by the VLE to the students where both the teachers and students get to participate in the online interactions. The primary components of VLE are student tracking, curriculum mapping, online support for the student and the teacher, e-mails, and the links to the internet to the external resources of the curriculum. VLE acts as a supportive tool in the field of education and has helped in the

curriculum modification, methods of teaching, educational resource, and personalised assessment.

However, it has also been pointed out in many studies that VLE has shown several challenges in the field of education. The usage of VLEs in the field of education has led to the transformation in the learning culture and the learners also need additional training for handling the technical software, the teachers also require proper training for upgrading their skills and it becomes challenging for them at times. It is also a time-consuming process. The lecturers also face several other problems like difficulty in collaboration, the preferences of the native languages of the students makes it challenging for the lecturers to communicate with the students as they fail to understand what the teacher is trying to convey (Gillett-Swan, 2017). Apart from all the problems one of the common problems faced by the teachers and the students in Virtual Learning environments (VLEs) is the problem with connectivity. Due to disruptions in the internet connection, the teaching sessions tend to get disrupted. But, several studies made on the students of the different universities have made it evident that with the application of the VLE the teachers have been able to achieve a higher level of satisfaction of the students. But it becomes challenging for those students who do not have access to proper internet connection, students who belong from underdeveloped countries fail to afford a personal computer or a laptop, so the system of VLE cannot be availed by them. This traces out a fine line of discrimination between the students. Not every student is privileged enough to avail of the service of VLE unlike the traditional learning system so that is also a major disadvantage (Langston, 2021).

3.0. Method

The data collection methods are of two types that is the quantitative data collection method and the qualitative data collection method. The validation of the Quantitative research method is expressed with the help of graphs and numbers. This data collection method helps to establish the facts about the research topic that are generalizable, while the qualitative data collection method is that method where the research is validated with the help of words. It helps in gaining understanding regarding the thoughts, concepts of the experiences. This method of data collection helps in gaining in-depth insight of the topic with the help of surveys or interviews done via open-ended questions (Strecker, 2019). Hence, this method of data collection can be said to be more reliable and valid. In this study the qualitative data collection method will be used on the students of the *University of Wales Trinity Saint David London Campus* where the experiences of the students of VLE Learning will be assessed.

In order to fulfil the aim of the research study a systematic approach was made by the researcher with the help of the following steps:

- The primary approach of conducting the research study was to identify the research philosophy, research approach and research design. After assessing the aims and objectives of the research topic the researcher decided to conduct the research by using positivism approach, deductive approach, and exploratory design for data collection.
- In order to understand the impact of the VLE-Moodle on the learning experiences of the students the primary data collection method is used in the form of the questionnaires and a survey is conducted amongst the students of the University of Wales Trinity Saint David London Campus, which is in London. The advertisements of this research study were posted on the social media page and only the student who possessed the skill of using a Moodle was eligible for this research.
- A number of 20 students participated in the research study and the method of purposive sampling was used for the collection of the samples.
- For the collection of the primary quantitative data 10 close-ended questions were designed by the researcher to conduct a survey. The 20 selected students were sent the questionnaire via e-mail or university online platform due to the pandemic, Covid-19 in order to maintain the social distancing norms.

5.0. Results

Q1. Do you think VLE has helped you to learn more efficiently?

Response 1	Response 2	Response 3	Response 4	Response 5
Strongly Agree	Agree	Neutral	Strongly disagree	Disagree
15 (75%)	3 (15%)	2 (10%)	0 (0%)	0 (0%)

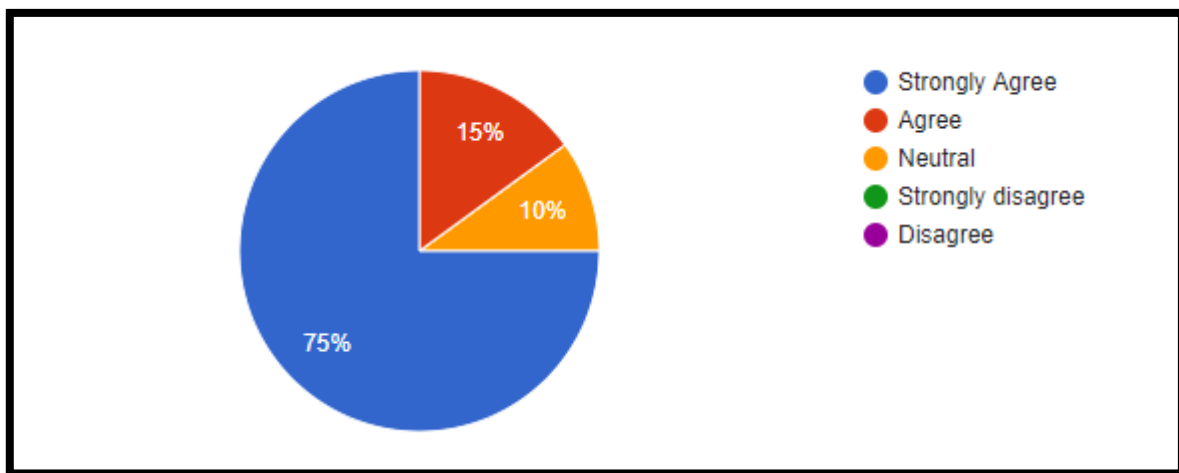


Figure 1: Results of the conducted survey

Q2. How important do you think is the implementation of VLE in the modern education system?

Response 1	Response 2	Response 3	Response 4
Very important	Important	Neutral	Not important
9(45%)	9 (45%)	2 (10%)	0 (0%)

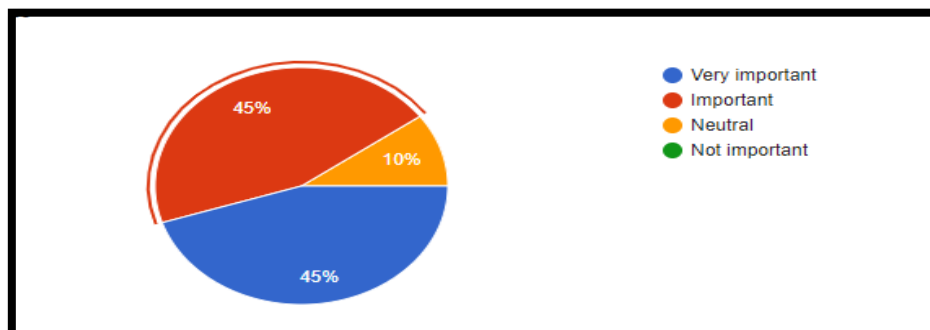


Figure 2: Results of the conducted survey

Q3. Do you think the VLE-Moodle learning system is better than the traditional learning system?

Response 1	Response 2	Response 3	Response 4	Response 5
Yes	No	May be	Strongly agree	Strongly disagree
5 (25%)	8 (40%)	6 (30%)	1 (5%)	0 (0%)

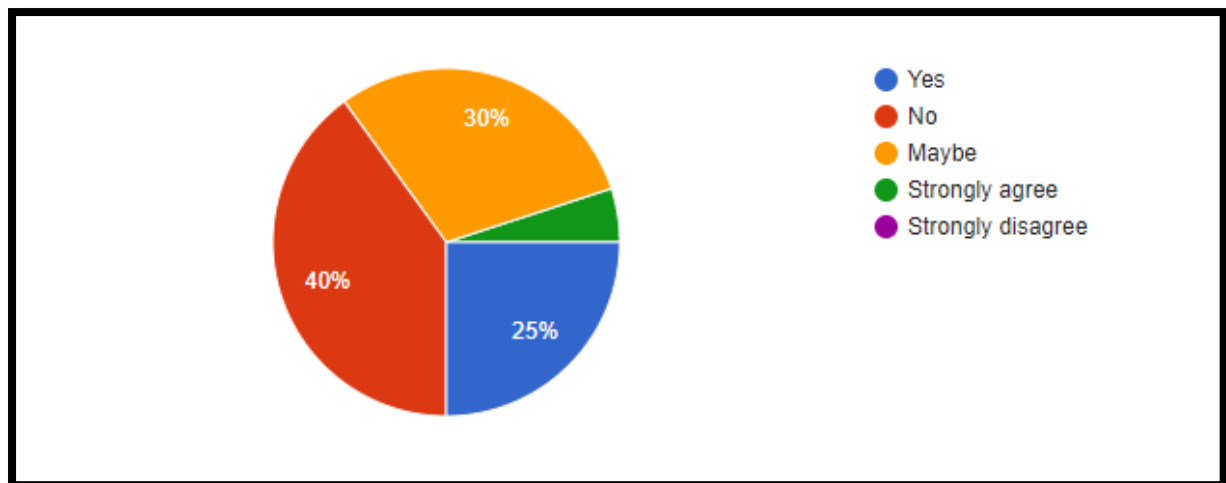


Figure 3: Results of the conducted survey

Q4. Do you think VLE has enhanced your technical skills?

Response 1	Response 2	Response 3	Response 4	Response 5
Strongly Agree	Agree	Neutral	Strongly disagree	Disagree
5 (25%)	3 (15%)	8 (40%)	1 (5%)	3 (15%)

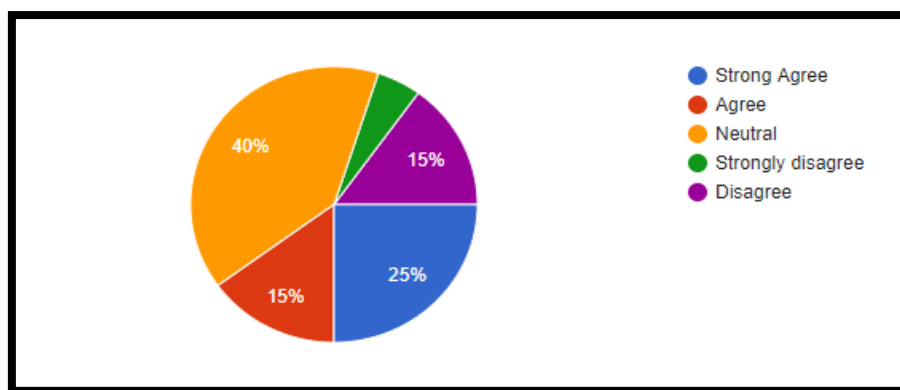


Figure 4: Results of the conducted survey

Q.5. How far do you agree that Moodle has a positive impact on the efficiency level of the students?

Response 1	Response 2	Response 3	Response 4	Response 5
Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
5 (25%)	7 (35%)	2 (10%)	6 (30%)	5 (25%)

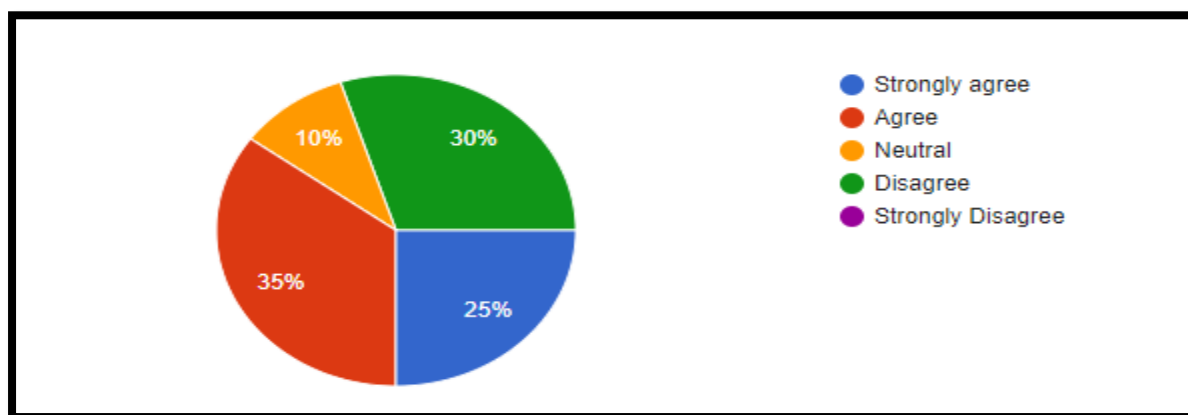


Figure 5: Results of the conducted survey

Q.6 Do you using Moodle as a time-consuming process?

Response 1	Response 2	Response 3	Response 4	Response 5
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Strongly Agree	Agree	Neutral	Strongly disagree	Disagree
5 (25%)	3 (15%)	4 (20%)	5 (25%)	3(15%)

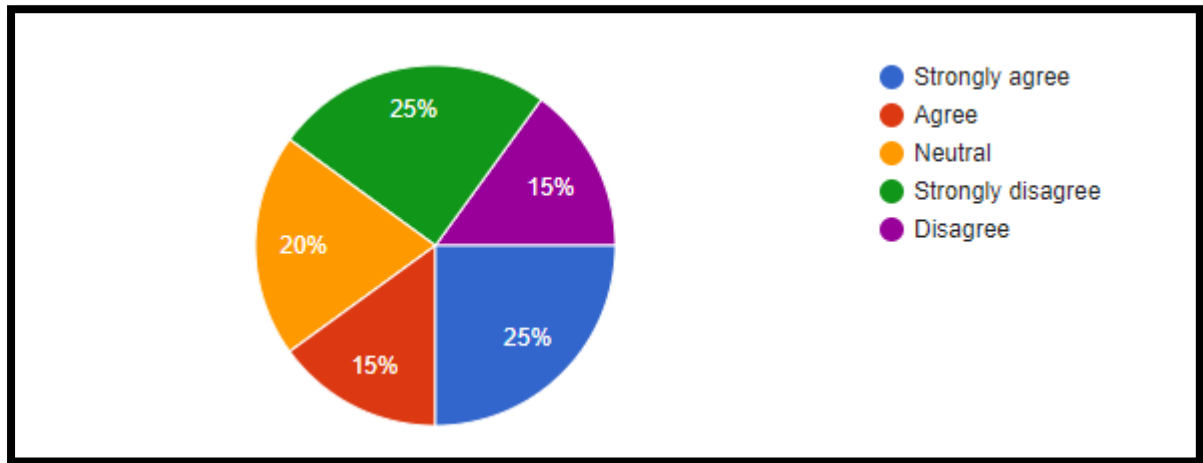


Figure 6: Results of the conducted survey

Q7. Do you agree that Moodle has enhanced the flexibility of learning?

Response 1	Response 2	Response 3	Response 4	Response 5
Strongly Agree	Agree	Neutral	Disagree	Disagree
4 (20%)	6 (30%)	6 (30%)	2 (10%)	2(10%)

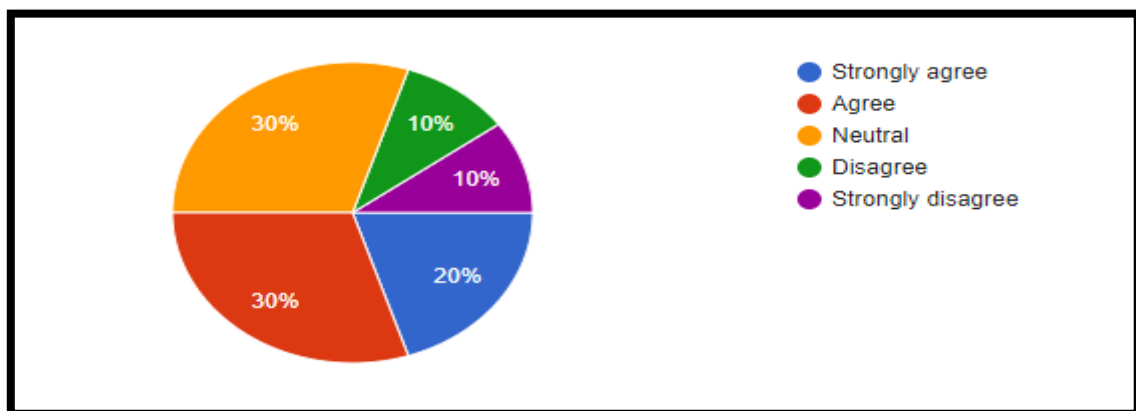


Figure 7: Results of the conducted survey

Q8. How far do you think has Moodle made the teaching-learning process easier for you?

Response 1	Response 2	Response 3	Response 4
To a greater extent	Hardly	Neutral	Not much easier
8 (40%)	7 (35%)	3 (15%)	2 (10%)

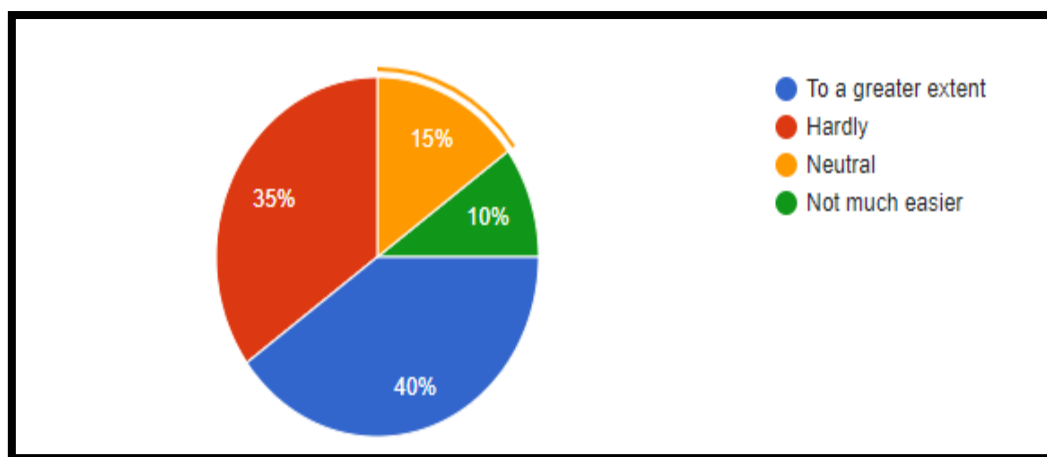


Figure 8: Results of the conducted survey

Q9. Do you think the usage of VLE Moodle can help in clearing off doubts in a much better way?

Response 1	Response 2	Response 3	Response 4
Yes	No	May be	Not really
5 (25%)	10 (50%)	2 (10%)	3 (15%)

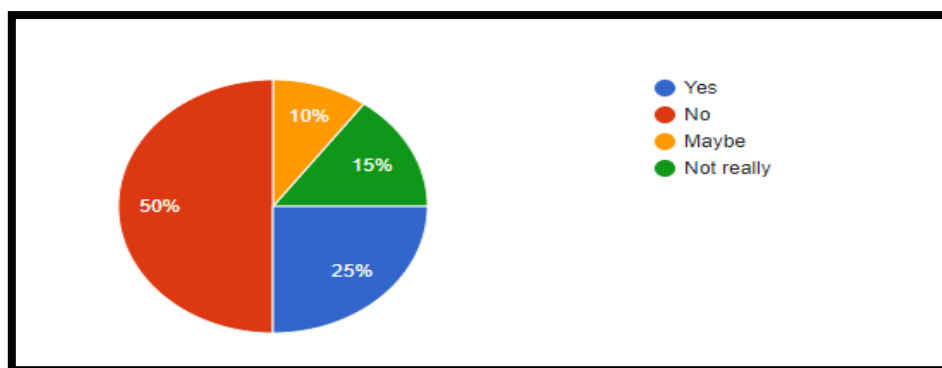


Figure 9: Results of the conducted survey

Q10. Do you think the VLE Moodle system of learning must have been implemented much before?

Response 1	Response 2	Response 3
Yes	No	May be
8 (40%)	10 (50%)	2 (10%)

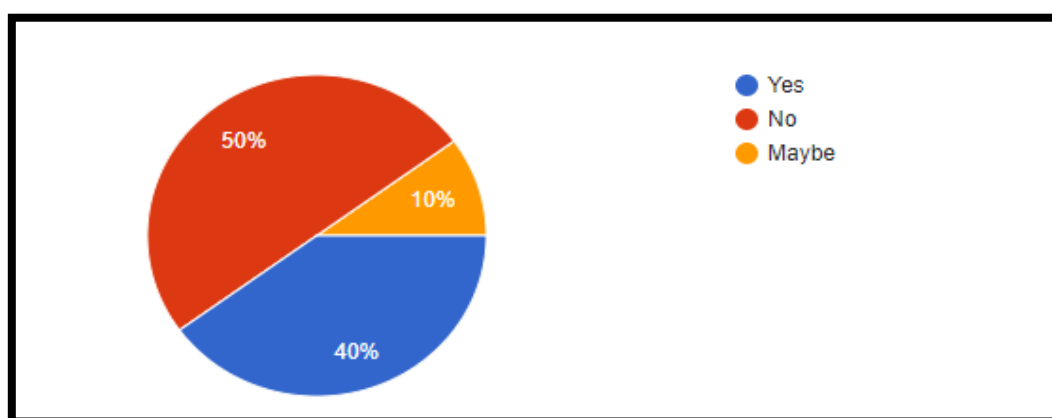


Figure 10: Results of the conducted survey

6.0 Discussion

As mentioned before that the data on the research topic was collected using the primary research method where 20 responses were collected from the students who were eligible to participate in the survey. The questions determine the learning experiences of the students using VLE-Moodle. According to the questions it has been seen 75% of the students that is 15 students strongly feel that VLE has helped them to learn more efficiently, while 3 students seem to agree to it and the remaining 2 students are neutral about this. Therefore, it can be said that the majority of the students consider that VLE has helped them to learn more efficiently. Students find it much easier to study using the VLE than studying in traditional classrooms, so 45% of them strongly feel that it is important to implement VLE in the modern education system. A virtual learning environment (VLE) gives the students an opportunity to communicate in a way that they could not in a physical classroom. It also tends to personalise the experiences of the students. During times of the Covid-19, while the entire curriculum is being carried on in the using VLE, so the role of VLE is to make the experience more fulfilling for the students so that they enjoy learning via VLE and find all kinds of assistance there (Dhakal and Sharma, 2016). In fact according to q3. 25% of the students feel that studying via VLE is better than the traditional system of learning while the majority do not seem to agree with this fact.

Some of the students also feel that their technical efficiency was enhanced due to the introduction of VLE in their curriculum, according to q5. 35% of the students have agreed upon the fact that VLE has had a positive impact on their level of efficiency. VLE has also improved the technical skills of the teachers and the lecturers, which can also be considered to be a positive impact because during the time of the pandemic, Covid-19 everything needs to be done virtually so having proper knowledge about using these virtual mediums are very necessary to create a better experience for the students (Kassim and Hassan, 2021). But, on the other, it has been pointed to 25% of the students that using Moodle is a time-consuming process, which can be identified as one of the major disadvantages of using Moodle. In q.6.

25% of the students have agreed that it is a time-consuming process, but still, 30% of the students strongly agree that Moodle has increased the learning flexibility of the students. It has also been seen that 40% of the students feel that using Moodle has made the learning process much easier for them. However, from q9. it can be understood that Moodle learning has not been very successful in the clearing of the doubts of the people as 50% of the students did not agree with that fact which is why most of them feel that the VLE Moodle system must have not implemented before, so despite the set of advantages the students still feel a traditional way of the classroom was much better.

7.0. Conclusion

Digitisation and technological advancement brought into the use of the VLE-Moodle system. Moreover, the onset of the Covid-19 pandemic changed the way how classes used to be held in the traditional way. The VLE-Moodle system was used in the **University of Wales Trinity Saint David London Campus** especially during the time of the pandemic to enhance the learning experience of the students. In this study, the advantages, disadvantages, and impacts of VLE-Moodle on the learning experience have been assessed through primary research. The survey conducted showed that though most students feel that VLE has helped them to learn better most of the students still prefer the traditional way of classrooms as that gave them scope to clear off their doubts easily.

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Appendix

Questionnaire for the survey:

Q1. Do you think VLE has helped you to learn more efficiently?

Q2. How important do you think is the implementation of VLE in the modern education system?

Q3. Do you think the VLE-Moodle learning system is better than the traditional learning system?

Q4. Do you think VLE has enhanced your technical skills?

Q5. How far do you agree that Moodle has a positive impact on the efficiency level of the students?

Q6. Do you use Moodle as a time-consuming process?

Q7. Do you agree that Moodle has enhanced the flexibility of learning?

Q8. How far do you think has Moodle made the teaching-learning process easier for you?

Q9. Do you think the usage of VLE Moodle can help in clearing off doubts in a much better way?

Q10. Do you think the VLE Moodle system of learning must have been implemented much before?

