

Digital skills and research method

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Certificate of higher education for workplace level 4

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Introduction

The focus of this research is to analyze the impact of virtual learning environment on the students. The factors that have implications on the learning of the students are being considered. Due to the pandemic the activities of the country were postponed due to the lock down in the country. The educational institutes were also closed and since the education of the students was at stake and the educational institutes had to ensure that they are using the online platform to ensure that there is no disruption. Since the advancement in the technology and the increase in its use have brought many changes in the world today. The virtual learning environment is a software system designed for the purpose of helping the students can continue their learning in the most efficient manner (Barker, & Gossman, 2013). Virtual learning brought its own pros and cons and this is the main reason that this research is being conducted in order to comprehend the impact of the virtual learning environment on the university students. The survey forms were filled by almost hundred students and their responses are analyzed in the comprehensive manner. The concept of the e-learning environment tends to ensure that the web platform is being used in the comprehensive manner in order to make the learning environment positive for the students.

Methodology

We have used the mixed method approach in order to ensure that the impacts of the virtual learning are comprehended in depth. Mixed method approach is said to be very useful when the researcher needs to analyze the quantitative and qualitative data. It helps the researcher in various ways as it helps to give a voice to the participants and ensure that the researcher is able to understand the experiences of the participants in the better way. Our targeted population were the hundred university student from the University of Wales Trinity Saint David London Campus. Due to the situation of the country, the survey forms that were prepared were sent to the students via mail. For the purpose of ensuring the well-being of the students the E-questionnaires were used and in order to analyze the secondary data the literature review collected from various different sources was analyzed. Sample is a small part which is selected from the targeted population via which the researcher can generalize the results to the population. In the survey form the liker scale was used in which the students had the option to choose the option of strongly (Phungsuk, Viriyavejakul, & Ratanaolarn, 2017). The consent of the students was also our priority and the researcher gave his word to the student their personal information will be kept confidential and the forms will be analyzed by the researcher alone. Hence their personal information will be kept confidential at all costs.

Literature review

The flexibility that a Virtual Learning Environment offers is much more advantageous than any other benefits of VLE (Kassim and Hassan, 2020). During contemporary education, when the aim is to improve the learning and teaching qualities for the enhancement of a student's performance, modes for education like face to face e-learning and blended online learning are the best way to achieve this (Al-Azawei and Al-Masoudy, 2020). As stated by (Hamutoglu et al., 2020) students can access learning material from the comfort of their homes. E-learning can be accessed pretty much anywhere as long as students have internet connection. Studies by (Hamutoglu et al., 2020) suggest that students will find more time to reflect and consider on issues which might be more sensitive and time consuming. Accordingly, VLE's also help in building a community for staff and students which help in reducing disengagement and isolation that they might feel through the pandemic, all the while enhancing the student's engagement and confidence (Alves, Miranda, & Morais, 2017).

In 2020 there has been vast improvement in VLE's concerning a student's learning. The impact of VLE's and how to measure them is still undecided by many institutions. They usually resort to measuring it in terms of how many students have viewed the lectures or downloaded them (Pulford, 2011; Orey, & Rosa, 2018). This can be an inaccurate measurement since students could just be downloading them as opposed to actually jotting down and actively interacting with the material (Keppell, Souter, & Riddle, 2011). Munas' study conducted in 2020, states that, online activities like forums, might expose a student to different perspectives which would give them the opportunity to learn from their mistakes, this might have great potential in the development of a student's higher skills (Munas and Arun, 2020). Munas' also found that through these online forums, social-work students had better learning outcomes as they retained more, and could therefore provide better and more useful responses for teachers, regarding their issues.

For VLE's to be successful, commitment, active participation and interest from students is an essential requirement. Discussions of tools and other technology based facilities, including the learning and teaching practices which affect the training of students and teachers is reflected upon in (Kassim and Hassan, 2020) article. On the other hand, studies by Al-Azawei and Al-Masoudy, conducted in 2020, show that, during virtual learning, a majority of students either fail or drop out completely in trying to achieve good scores in their online assignment and assessments. The study concluded that a main reason for this was due to students facing barriers while imposing these learning techniques, followed by demotivation because realistically there is an absence of a student and teacher learning environment (Songkram, 2015).

Studies by these sources are carried out by classification via regression models and methods. For example, Hussain et al tried to aim at improving and predicting the student's assessment scores and the extent to which that particular student engaged in online classes. With the use of 7 classification algorithms from which one was selected because of its accuracy i.e. J48 technique. Whereas Hamutoglu et al through numerous different studies, concluded that predicting the performance of a student through different learning modes was an extremely complicated process because of the numerous variables involved.

Analysis

The data of the questionnaire was analyzed by the researcher without being bias as our sample was small. Thus, it was easier for the researcher to analyze the data and conclude the results. There were seven questions in the questionnaire (Xu, et al, 2014). The data which analyzed is presented in the form of graph below. The data is analyzed in order to comprehend the perception of the

students and the impacts that the virtual learning environment have on the students. For the quantitative part we have used the tabular form to analyze the data and the graphs. While thematic analysis is used for the qualitative part for the purpose of reviewing the themes. Licker scale was used in the questionnaire survey forms in order to ensure that the much time of the participants is not consumed.

Question 1: Using Technology in learning is effective

Twenty five people strongly agreed that using technology is very effective for their studies, thirty-five people agreed, ten people were neutral as they did not have any opinion on this that it can either be important or not, twenty-five people disagreed that using technology is not very effective and only five people strongly disagreed that they don't consider technology important for their studies.

Question 2: The use of VLE in English class motivates the students to learn more

Ten people strongly agreed that use of technology tends to motivate the students to learn more about their subjects, thirty people agreed that the virtual learning environment tends to motivate the students, twenty people were neutral as they did not have any opinion on this that it can either be the source of motivation or not, thirty people disagreed that they don't believe that the virtual learning environment can be the source of motivation for the students and ten people disagreed that they the use of the virtual learning environment motivates the students to learn more.

Question 3: VLE is better than the text books

Five people strongly agreed to this question that the virtual learning environment is better than the books, twenty-five people strongly to this question, twenty people were neutral, thirty people disagreed to this question as they don't believe that virtual learning environment is better than the text books and twenty people strongly disagree to this question that they do not believe that the virtual learning environment is better than books for these people text books are more important.

Question 4: VLE makes communication effective between the student and teachers

Twenty-five people strongly agreed to this question that the virtual learning environment makes communication effective between the student and teachers, twenty-five people agreed to this question, ten people were neutral, twenty people disagreed to this question as they don't think that the virtual learning environment makes communication effective between the student and teachers and twenty people strongly disagreed.

Question 5: VLE is helpful as it gives the flexibility to the students to learn and submit their tasks any time

Thirty-people strongly agreed to the question that virtual learning environment is helpful as it gives the flexibility to the students to learn and submit their tasks any time, thirty people agreed to this question, twenty people were neutral because they had no opinion to it, ten people disagreed to this question, and ten strongly disagreed that they did not believe that virtual learning environment is helpful as it gives the flexibility to the students to learn and submit their tasks any time.

Question 6: It is needed to bring more improvement in VLE

Fifty-people strongly agreed to this question that it is needed to bring much improvement in the virtual learning environment as they believe that there is much room for improvement, thirty people

agreed to this question that yes they also think that much improvement is needed, ten people were neutral and ten people disagreed that they don't think so much improvement is needed.

Question 6: It is sometimes become difficult to communicate with the teacher

Forty people strongly agreed to this question that sometimes it is difficult to communicate with the teacher during the virtual learning because of many issues. Twenty people agreed to this question, none of the people was neutral, thirty people disagreed to this question while only ten people believe that it is not the case and they communicate with their teacher easily.

The results are presented in the graph below.

Results:

There were mixed reviews as few of the students believed that technology helps them to learn the things in the more comprehensive manner and they are motivated to learn. But few of the students believe that there is room for improvement because they do find difficulties in communicating with the teacher which hinders their learning too.

Conclusion

In conclusion, The virtual learning environment can be defined as the software system designed for the cause of helping the students so that they can continue their learning in an excellent manner without any hurdle. It can be said the virtual learning environment does have certain implications for the students. Some of the students feel that it is sometimes become very difficult for them to interact with their teachers and the online virtual learning system should be improved. The mixed method approach was used in order to ensure that the researcher understands the subject matter in depth. Thus, there were mixed reviews but it can be said for sure the virtual learning environment has given new hope to the students and the teachers. No matter how tough the situation is and the students are unable to attend their classes but via the modern technology there problems are solved.

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Appendix

Questionnaire for Survey

Please fill this survey questionnaire that intends to collect the data for a particular research. All the information provided will be kept confidential

Age:30

Gender: Male

Occupation: Driver

S.no. Statement Strongly Agree

1 Agree

2 Neutral

3 Disagree

4 Strongly disagree

5

1. Using Technology in learning is effective

25 35 10 25 5

2. The use of VLE in English class motivates the students to learn more 10 30 20
30 10

3. VLE is better than the text books

5 25 20 30 20

4. VLE makes communication effective between the student and teachers 25 25 10
20 20

5. VLE is helpful as it gives the flexibility to the students to learn and submit their tasks any time 30 30 20 10 10

6. It is needed to bring more improvement in VLE 50 30 10 10 0

7. It is sometimes become difficult to communicate with the teacher 40 20 0
30 10