

Report

Digital Skills and Research Methods

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Topic: The impact of Virtual Learning Environment (VLE; as an example Moodle of our university) on the learning experience of the students at UWTSD London campus.

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Introduction

Covid-19 has caused problems and instability across the Higher Education business, including the closure of university campuses, the shift from traditional classroom teaching and evaluation to an online approach, and the elimination of certain courses entirely. The knowledge gained from the experiences of students throughout this time period will help develop future hybrid delivery methods so that they are optimally suited for students. The purpose of this specific study is to investigate the effects that the use of a virtual learning environment has had on students attending classes at the UWTSD London campus. Whereas 21 students were interviewed to find out their thoughts on the topic at hand and what they would advise the administration to do in order to improve the educational opportunities available to students in the future at the university.

Rationale

Virtual Learning Environments (VLEs) allow temporal and location freedom in the classroom. Unrestricted and frequent access to learning materials helps students balance their academics with other objectives and activities. This makes it easier to continue the education while working full-time or caring for a small kid.

Students may choose their own time and difficulty levels. Slow learners don't need to wait for the group to move on to the next topic; everyone may spend as much time as needed reading and watching the videos. Internet education makes schools obsolete. Rural areas, distant continents, and disabled people now have access to a high-quality education. The virtual learning system enables ongoing learning even whether on vacation, on a business trip, or ill in bed. Eliminating campus fees makes higher education more accessible by decreasing the cost of a degree from any school, even the most prominent. Foreigners have it better since they don't need to spend much money. VLEs help teachers organise their time, track student achievement, and aid individuals who need more resources. VLE may analyse and change the current curriculum. Virtual classrooms encourage innovation in content and delivery techniques. Online quizzes, videos, and podcasts increase learning. Multiple activities gamify learning and engage students.

Research Objectives

The objective of the research is

- To develop the students' digital proficiency in the workplace using the VLE.
- To increase awareness of the significance of an efficient examination of the information and its conversion into knowledge.
- To strengthen the UWTSD London Campus students' preparation for learning environments.
- To advise the researcher, depending on the VLE, how to get around the restrictions in the future.

Literature Review

Background

Since the 1970s, when the CALL technique first gained prominence, technologically-enhanced learning has been at the forefront of linguistics research. The primary focus has been on whether or not the use of technology in the classroom has a net good or negative impact on student's academic performance and whether or not computer-mediated learning may improve students' proficiency in a second language. It's only natural that computers have had a profound effect on traditional classroom instruction, where instructors were formerly seen as the primary source of information. As both students and teachers have become adept at using new technologies, the horizons of both have broadened and varied in terms of curriculum development and pedagogical approach.

Virtual learning environment (VLE)

A VLE, or virtual learning environment, is an online classroom equipped with a variety of tools for teaching and learning. According to the definition provided by Ryan and Poole, "software packages that allow an instructor to teach portions or the whole course via a Web-based environment" (LMS/CMS) are used in today's educational institutions (2019). These authors argue that VLEs should be used as a complementary resource to traditional classrooms since they provide teachers with a wealth of resources for reviewing previously taught content. A "learning management system" (LMS) is a "content management system" (CMS) used for educational purposes.

Tools of Virtual Learning Environment

It is described by (Hantoobi *et al.* (2021) as "web-based platforms on which course materials may be hosted". A "VLE permits the development of online courses and the enrollment of students in those courses; inside the courses themselves, it is possible to mix different types of materials with more interactive features, such as quizzes, surveys, and so on.." (Diab-Bahman *et al.*, 2021). Teachers may utilise chat to have one-on-one discussions with their students or send them messages, and they can set up face-to-face meetings with their students using tools like Skype or videoconferencing. All of these programmes illustrate how a VLE may serve as a repository for a wider variety of resources (Lacka and Wong, 2021).

Students' approach to Virtual Learning Environment.

As a result of this convergence of learning strategies, academics and educators have begun to focus on the multiliteracy approach, which is designed to supplement rather than replace teachers' efforts in the classroom as a result of technological advancements. However, not everyone agrees that the advantages of using technology in language education outweigh any potential drawbacks. It's natural to assume that today's children would welcome the opportunity to utilise technology in the classroom with open arms (Al-Azawei and Al-Masoudy, 2020).

Research Methodology

The focus of this "Research Methodology" idea is on the flexibility of the research environment in terms of its coordination, processing, and overall design. The importance of research methodology cannot be overstated while making a presentation or conducting a study. A research plan lays out the steps that must be taken to proceed with the study and provides guidance on how to take those steps. The research also emphasises the significance of the most probable methods to identify the current job at hand (Mohajan, 2018). This study is mostly qualitative and descriptive in nature but does use some quantitative research techniques. To achieve this goal, the comprehensive method combines primary quantitative data with secondary quantitative data. Qualitative research would not have been as fruitful without the use of various methods and instruments. Qualitative research seeks to understand how individuals and groups feel about a social or human problem. The research process consists of the formulation of questions and procedures, the gathering of data in the context of the participant, inductive analysis of the data that progresses from particular to overarching themes, and the researcher's interpretation of the findings.

Data, Primary and secondary data

The positivist research philosophy will be utilised to evaluate the present study's methodical progress. In addition, the deductive method will be employed to make sense of the available facts, diagrams, and information in order to shape the final product of this investigation. Interview questions organised into a questionnaire schedule will be considered as a means of gathering primary data. Further, for the collection of secondary data, a number of research papers, journals and newspaper articles on the concerned topic have been taken into consideration.

Data collection process

Student responses were collected using a structured survey that probed respondents' familiarity with VLEs, attitudes about the use of ICT in the classroom, and a variety of technical tools. An online survey conducted via the mode of office.com has been used to gather the responses of the selected 21 students. In this online survey, students were asked to answer five questions. The only reason paper surveys weren't converted to online versions was because of time constraints. Respondents spent little more than 10 minutes filling out the surveys, which were composed of multiple-choice questions.

Population, Sample and Sample size

Twenty students from the London campus of the University of Wales Trinity Saint David made up the sample population. Each participant for the survey was selected using a random sampling technique to ensure that the results are unbiased, varied, reflective and representative of the student body.

Ethics in data collection

According to Kara (2018), any study that does not take the necessary precautions to ensure the protection of its data and does not maintain the necessary degree of integrity in terms of its confidentiality is insufficient. The students are giving away their valuable feedback to improve the system and for the betterment of education. The confidentiality of the participants and their safety were accorded the utmost importance. All of the responses were saved in a section of the moodle that required a password in order to maintain the confidentiality of the pupils.

Results/Findings, analysis and discussion

Primary data analysis

It has been discovered that the course management system Moodle has a significant amount of acceptability and is quite popular among students. Students find it helpful for a variety of reasons, including its extended domains, varied features, and capabilities, as well as its quick accessibility. Students have a great experience using the platform, which makes them feel at ease, and they get helpful assistance anytime they need it. For this reason, as a response to the issue of whether or not students find moodle beneficially, twenty students have articulated their favourable views towards the platform in a detailed manner.

The second inquiry centred on the amount of time that students spend using the site. It has been observed that, apart from the time spent in offline classroom lectures, the students prefer to utilise moodle for the majority of the time that they spend engaging in academic pursuits. They are able to get more comfortable with their schoolwork and studies thanks to the moodle platform. According to what can be deduced from the pie chart, fifteen students devote all of their available study time to using moodle. Few pupils are confident enough to engage in the independent study without the assistance of moodle.

Moodle has an incredible level of compatibility with pupils. As a result of this, each individual who took part in the poll stated that the Moodle open source learning platform is so helpful that they surely can share it with the other students as well.

It is already evident that moodle is the desired and favourite study help platform for the students of the University of Wales Trinity Saint David London campus precisely. Therefore when they were to give their response to the question of rating the performance level of moodle, almost everyone rated it excellent. There are a few students who do not have access to good internet. They do not get to enjoy the utmost facilities of the platform. Therefore they have rated the moodle as poor.

The University has provided the students with a moodle account. Therefore, each of the students of the university is comfortable using the educational platform. The pie diagram reflects the statement precisely.

Secondary data analysis

Most of the literature and research around the use of the Web and Internet-based technologies has focused on the apparent benefits for the student. In this regard, one might work on improving one's study habits and acquiring transferable skills (Torres Martín *et al.*, 2021).

Online communities and other kinds of social media have proliferated in recent years. Some have suggested that this has benefited students' access to education by expanding their opportunity to learn and share information (Chui *et al.*, 2020). It has been argued that educators may foster a more student-focused learning environment and instructional strategy by making more use of Web and Internet-based technology (Odrekhivskyy *et al.*, 2019). It has been maintained that student-centred approaches are the best way to equip students for success in the 21st-century workplace.

There has been a growing need to be aware of digital poverty and how it affects students' health, but the pandemic has also shown how open-minded teachers and learners are about continuing to use online platforms for instruction and evaluation in higher education. As a consequence of the pandemic, students have become experts in working remotely, which is reflective of the global modifications made by many organisations in response to new legislation, restrictions, and standards (Herrador-Alcaide, Hernández-Solís and Sanguino Galván, 2019). There's little doubt that online courses have their advantages, and broad use of social media might be good news for universities. However, our investigation has shown a major challenge associated with online education: ensuring that our students are comfortable interacting and working together in digital environments (Hamutoglu *et al.*, 2020). Teachers should be mindful of students' worries regarding the use of video cameras in the classroom, despite the fact that institutions may see this as a way to duplicate classroom interactions online. Education providers should use the knowledge obtained through online teaching and encourage a blended approach to educating, assessing, and keeping tabs on their students' development.

Summary of the findings

According to data, it has been observed that students often draw upon prior knowledge to inform their present-day education. They learned new things and developed new abilities. They made effective and novel use of moodle ICT. The use of mobile applications was a source of frustration for the students. The students asked insightful questions that helped everyone learn more (UWTSD, 2016). All things considered, the students stayed on task and concentrated. They were obviously enthusiastic and proud of their contributions. There were also negative reactions about a lack of interest, distraction, technical skill, and the inability to articulate prior and current knowledge. The images clearly show that the arrival time is a drawback. Students may have been more likely to be tardy to virtual learning environment (VLE) lectures because they saw them as more relaxed and fun.

Conclusion and Recommendation

It may be inferred that the number of students who saw the use of the Internet and its associated resources as worthless, perplexing, and overwhelming declined dramatically after acquiring experience with it, particularly when it came to the usage of a VLE in their learning process. These learners appreciate the value of a VLE and find the tools utilised to implement it to be intuitive and effective. To be sure, most students would rather use an online or digital resource than a textbook.

The university needs to take good care of the student's problems regarding the use of online platforms. Many students find it difficult to access through a good internet connection, some are not even comfortable using online platforms. For them, the university must take care of providing them with good gadgets and better internet accessibility. The university can conduct special learning classes for those students so that they can learn to use gadgets as well as they can effectively learn their coursework as well.

Students who are considered digital natives may be adept at the devices and software they use most often for communication and pleasure, but they often have trouble with those used for academic reasons. Students, however, argue that educators should actively incorporate technology into the classroom.

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Appendices

Appendix 1 (Class activity 1-Questionnaire)

Q1. Do you find Moodle?

- A) Yes
- B) No
- C) Maybe

Q2. How often do you use the moodle?

- A) Never
- B) Sometimes
- C) Always

Q3. You will recommend Moodle to other students?

- A) Yes
- B) No
- C) Maybe

Q4. How would you rate the Performance of Moodle?

- A) poor
- B) Fair
- C) Good
- D) Excellent
- E) Very Good

Q5. From where did you know about Moodle?

- A) University
- B) Friends
- C) Family
- D) Others

Appendix 2 (Class activity 2-Excel Result table)

1. Do you find Moodle useful? (0 punct)

95% din respondenți (20 din 21) au răspuns corect la această întrebare.

[Mai multe detalii](#)



2. How often do you use Moodle? (0 punct)

29% din respondenți (6 din 21) au răspuns corect la această întrebare.

[Mai multe detalii](#)

[Detalii](#)



3. You will recommend Moodle to other students? (0 punct)

100% din respondenți (21 din 21) au răspuns corect la această întrebare.

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[Detalii](#)

Yes	21	✓
No	0	



4. Do you would rate the Performance of Moodle? (0 punct)

24% din respondenți (5 din 21) au răspuns corect la această întrebare.

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[Detalii](#)

Poor	1	
Fair	2	
Good	13	
Excellent	5	✓
Very good	0	



5. From where do you know about Moodle ? (0 punct)

100% din respondenți (21 din 21) au răspuns corect la această întrebare.

[Mai multe detalii](#)

