

MODULE BMSW4003 DIGITAL SKILLS AND RESEARCH METHODS

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**Impact of Virtual Learning Environment (VLE) – Module on
Students’ learning experience in the University of Wales Trinity
Saint David London Campus**

Table of Contents

Introduction	3
Research Aim	3
Research objectives	3
Rationale	3
Literature Review	4
Research Methodologies	5
Analysis and discussion	6
Findings	9
Secondary analysis	9
Limitation of the research	10
Recommendations for future research	10
Conclusion	11
Recommendation	11
References	12
Appendix 1	13
Appendix 2	15
Appendix 3	18

Introduction

In today's modern world, students are seeking out modern techniques to pursue their courses and complete academic studies. In this process, Virtual Learning Environment (VLE) can be the best choice that can provide proper requirements to students to progress them from passive to active learners (Bender *et al.*, 2016). It consists of multiple important components that directly or indirectly allow students developing skills and influencing personnel as well as professional development process simultaneously. VLE promotes active learning through which students could build and improve their critical thinking skill that enables them to think and act critically. This research paper is going to reveal the impact and influence of VLE on students and their learning systems.

Research Aim

The key aim of this research is to identify and recognize the impact of VLE on students and their learning systems.

Research objectives/Rationale

- To develop learning environment for students of the UWTSD, London campus
- To improve student awareness regarding digital skills through VLE
- To represent benefits of using VLE in students learning system at UWTSD, London campus
- To suggest remedies for overcoming drawbacks associated with VLE utilization in student learning system

Modern era is an era of technology, where it has been necessary for the students to update their learning environment and system with modern one to achieve best academic outcomes. Especially in this scenario of global pandemic of Coronavirus, students can continue their studies

and complete the academic system through using VLE (Mendez and Florez, 2018).The purpose of this research

Literature Review

This section will review multiple articles, PDFs and journals collected from various credible sources to measure the validity of the research problem statement.

Overview and component of VLE

VLE is the perfect innovation in the modern education system that could assist students to continue their academic studies in all conditions without any serious difficulty. As opined by Martelloni *et al.* (2018), VLE is "Eight dimension E-Learning framework" designed to provide online facilities to students from any corner of the planet. Students who are passionate in terms of their study and unable to join college or school due to reason, could also join the same for better academic results and career. This E-learning platform is based on a simple concept of offering best class study materials and opportunities to global students. Undoubtedly, this VLE platform could assist the students to improve their awareness regarding digital skills and significance of online learning processes that could support any type of critical situation. VLE supports students to improve their academic and digital skills so that they could be hired by established business foundations. In VLE student groups, there must be online communities and virtual communities that initially communicate via the internet for learning along with exploring more. Through this system, it has been possible to engage students in the best class study system, where they would have the maximum facilities to engage with tutors via online. According to Fernández *et al.* (2017), VLE is an open source that is popular as emerging education practice enables students capitalizing over the scope along with power of the internet for creating and managing their own learning experiences. Overall, the system of Virtual Learning is quite simple and reliable in all situations. VLE allows students to work with the guidance of a virtual

teacher-mentor for exploring and creating new concepts over their study and academic subjects, primarily via the internet.

Benefits of using VLE in student learning system

VLE is considered a collection of software tools that support academic administration using the World Wide Web. This concept of virtual learning environment is associated with multiple benefits that directly or indirectly assist students to develop their academic skills. According to Mao *et al.* (2017), the key focus of the VLE system is always students and meeting their academic requirements for greater personal development and career building. VLE provides a virtual classroom, where students would have utmost quality materials and resources. This leads students towards better focusing on their academic skill and career development. Further, it engages students across the planet with the same facility and minimal expenses, which has made this VLE learning system innovative as well as effective. As per Qin *et al.* (2018), effective time management is another key advantage of this VLE model that is crucial for personal development of students. Through VLE, students can easily manage their homework and studies within a stipulated time period. Moreover, virtual platforms provide freedom that automatically grabs the attention of students all over the world.

Research Methodologies

Qualitative

Qualitative approach of the primary research method enables the researcher to find the utmost legit and valid information over any particular subject that leader's researcher towards accomplishing expected outcomes in the entire project.

Quantitative

Another effective approach of primary research is a quantitative approach that is helpful in collecting statistical valid data from respondents directly. Thus, researchers have been considering this approach as well.

Secondary research

Secondary research methods are appropriate to collect the required information from online research materials, allowing researchers to acquire relevant data sets and use them to reach out to expected research outcomes. Thus, I have been using this research method as well.

Sampling technique and sample size

I have decided to use non-probability sampling techniques so that it will be easier for me to complete the survey program without considering the entire population. In order to perform a survey at UWTSD, London campus on the impact of VLE in the student learning system, 20 students have been invited.

Ethical consideration

Following GDPR 2018 in the course of collecting and securing data information, will allow both genders in surveys and promote Equality Act 2010.

Analysis and discussion

Design Questionnaire

[Refer to Appendix 1]

Q.1. VLE Moodle can help in fulfilling academic requirements effectively

Strongly agree	Agree	Do not know	Disagree	Strongly disagree
6	5	4	3	2
16	16	16	16	16

Table 1: Requirement of VLE

Q.2 VLE Moodle can be beneficial for the teachers to maintain effective conversation with the students

Strongly agree	Agree	Do not know	Disagree	Strongly disagree
4	7	1	2	2
16	16	16	16	16

Table 2: Benefits of VLE

Q.3. VLE Moodle can help students to improve their academic growth

Strongly agree	Agree	Do not know	Disagree	Strongly disagree
6	4	3	2	1
16	16	16	16	16

Table 3: Improve the academic growth

Q.4. VLE can be helpful at UWTSD to make improvements for students

Strongly agree	Agree	Do not know	Disagree	Strongly disagree
4	8	2	1	1
16	16	16	16	16

Table 4: Improvements for students

Q.5. VLE Moodle can help in maintaining a healthy environment for improving learning growth

Strongly agree	Agree	Do not know	Disagree	Strongly disagree
5	6	1	3	1
16	16	16	16	16

Table 5: maintaining healthy environment

Findings

[Refer to Appendix 2]

From the above -mentioned tables, it is possible to state that VLE is acceptable in the modern world. This can assist students in different ways to fulfil their requirements. Keeping this in mind almost 51% of the total population agreed with the statement, where few of them were against the statement, especially due to lack of proper knowledge over the topic. Not only students, but also teachers could achieve benefits from the VLE concept. Similarly this statement was agreed by over 50% of the entire survey population. Teachers can help students any time and influence their academic growth and performance simultaneously. In the context of academic growth, VLE can be extremely useful that would directly or indirectly support students to scale up their current academic performance standard. This statement was appreciated by over 65% of the entire survey respondents, which is clearly showing the needs of VLE in the current study system.

Secondary analysis

[Refer to Appendix 3]

Theme 1: Components of VLE

As per Fernández *et al.* (2019), major components of the VLE involve the educational portals as well as mapping that are segregated into a range of sections. Therefore, these sections are required to be effectively assessed as well as assigned. Therefore, as argued by Manojkumar and Sivaprakash (2018), the VLE can be supported and contributed in monitoring the students with the help of offering online support to the teachers and its students. It also ensures effective communication with the help of emails, web publishing and so on. It enables the students to undertake mapping as well as planning as per the map.

Theme 2: Impact of VLE on students

In terms of the traditional learning, which is considered as face to face learning that has been outmoded by the digitalisation. As per Herrera, (2017), nowadays, the development of the students is done with the digitalisation along with the digital natives with the help of the teachers that offers them several learning environments within which the student can ensure rapid progress. As per Azimi *et al.* (2018), it may also have a negative impact on the students as it may

lead to distract the students easily. However, with the help and effective consideration of comprehensive discussions regarding the engagement of the students in terms of leaning with the help of internet is done which helps the students to understand the modern technology.

Limitation of the research

While undertaking the research, I have faced a range of limitations which has prevented me from performing the task in an effective manner. Therefore, the shortage of time was one of the limitations which were preventing me from generating more in-depth data reading the research topic. Moreover, the phase of lockdown due to the COVID 19 outbreak was also one of the major challenges which were preventing the overall team to undertake the data collection progress in an effective manner. Apart from that, the selection of effective journals, articles as well as books was also highly challenging. Thus most of the reliable and accurate journals were not offering the access for collecting the data which was also a potential limitation for the research that has been identified.

Recommendations for future research

There are several recommendations which would be beneficial for the future research that is given below:

The consideration of an effective cost plan can be done in order to mitigate the issue of allocation of cost which would be beneficial for ensuring cost-effective nature of the research.

It would also be recommended to utilise an effective time management schedule so that the allocation of time as per the nature of the task can be done in an effective manner.

It is also recommended to opt for other alternative methods of the research such as qualitative and hybrid so that in-depth data can be generated in order to reach the set objectives.

Lastly the consideration of paid journals and articles can also be done in order to further improve the quality as well as accurate of the data and generate real-time data in an effective manner.

Conclusion

From above description, it can be ascertained that modern technologies such as VLE or Virtual Learning Environment could be created for students, where they would have the maximum flexibility as well as opportunity to extend their knowledge boundaries. This could provide a better environment and opportunities to bright up career pathways. Both primary and secondary research methods have been undertaken in this study to evaluate effectiveness and contribution of VLE in improving modern study systems.

In conclusion, it can be observed that the conduction of the entire research has been done based on the student of the University in terms of active participants on the digital platforms like VLE for learning and developing. However, several issues have been identified in the literature review section of the research based on the components of VLE and its impact on the students. Therefore, the consideration of both play as well as secondary data collection has been done for the purpose of the research so that the collection of reliable as well as authentic data can be done. It is further concluded due to the help of platforms like VLE students are able to carry-out their learning in an effective manner in spite of the pandemic.

Recommendation

Virtual learning environment is a new concept in the market, especially using an e-learning system in the modern study world is quite difficult for new users. In this process, proper awareness regarding the system and associated functions is strictly necessary that could engage more numbers of students, families and tutors at the same place. In order to adopt VLE in modern study, improvement of the infrastructure is required. Promotion to adopt modern technology and digitalised systems could bring more attention to students to this technology that could step up the study system to a step ahead.

I would personally recommend for each class and module type, to be shown only for those students, for example if I am study Skills for the Workplace, do not need to see other groups and other modules apart from what i ' m studying, like Health and Social Care for the simple reason that is confusing in special for beginners in Virtual Learning Space.

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Appendix 1

Q.1. VLE Moodle can help in fulfilling academic requirements effectively

- **Strongly agree**
- **Agree**
- **Do not know**
- **Disagree**
- **Strongly disagree**

Q.2 VLE Moodle can be beneficial for the teachers to maintain effective conversation with the students

- **Strongly agree**
- **Agree**
- **Do not know**
- **Disagree**
- **Strongly disagree**

Q.3. VLE Moodle can help students to improve their academic growth

- **Strongly agree**
- **Agree**
- **Do not know**
- **Disagree**
- **Strongly disagree**

Q.4. VLE can be helpful at UWTSD to make improvements for students

- **Strongly agree**
- **Agree**

- **Do not know**
- **Disagree**
- **Strongly disagree**

Q.5. VLE Moodle can help in maintaining a healthy environment for improving learning growth

- **Strongly agree**
- **Agree**
- **Do not know**
- **Disagree**
- **Strongly disagree**

Appendix 2

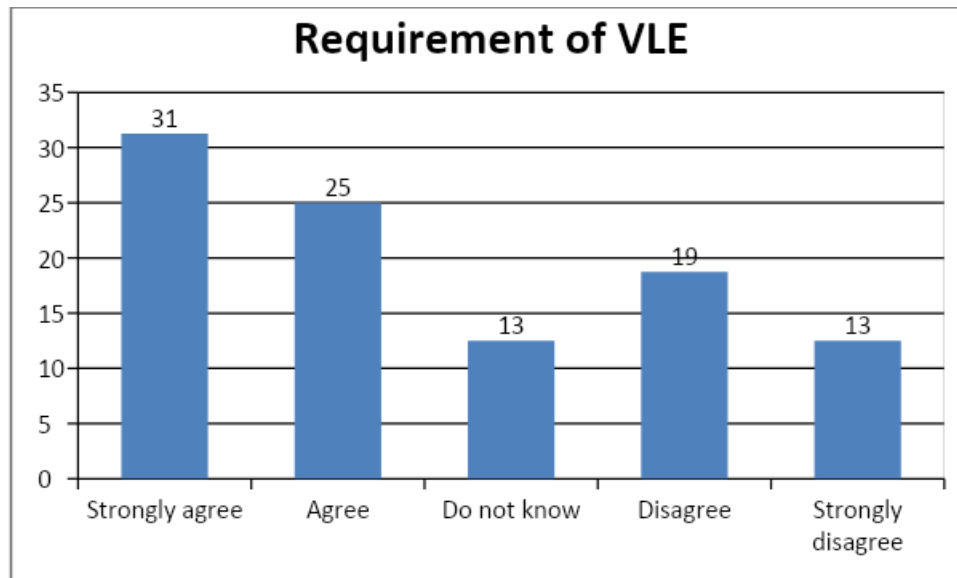


Figure 1: Requirement of VLE

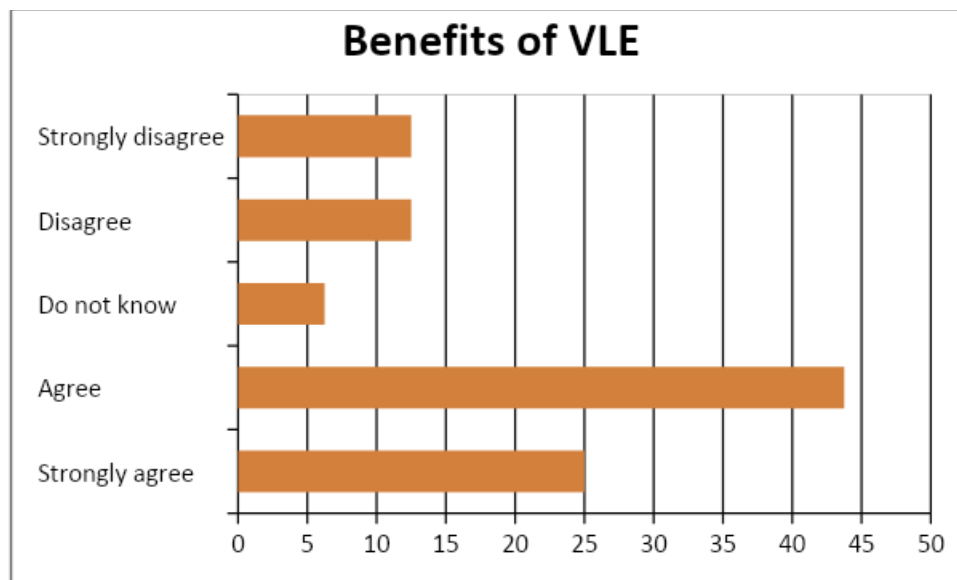


Figure 2: Benefits of VLE

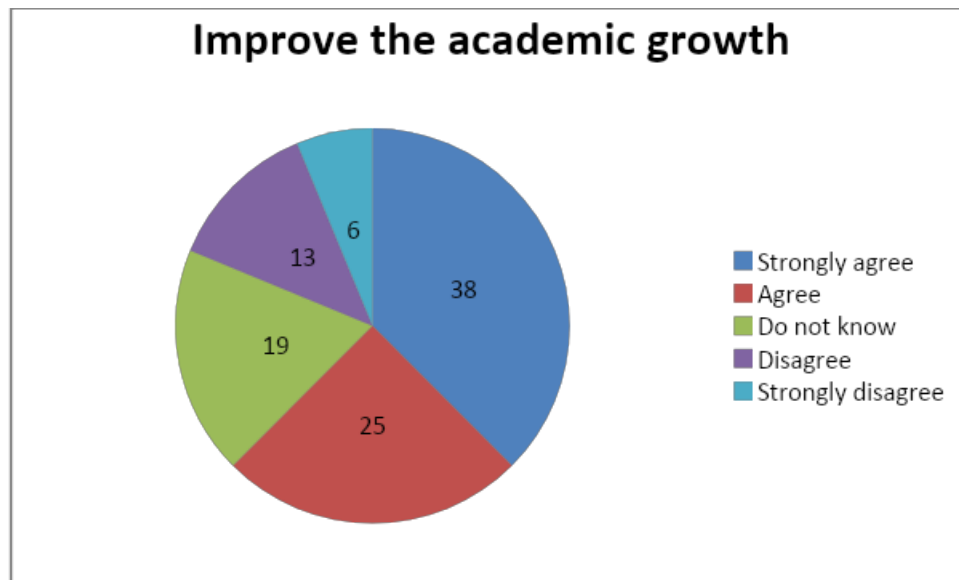


Figure 3: Improve the academic growth

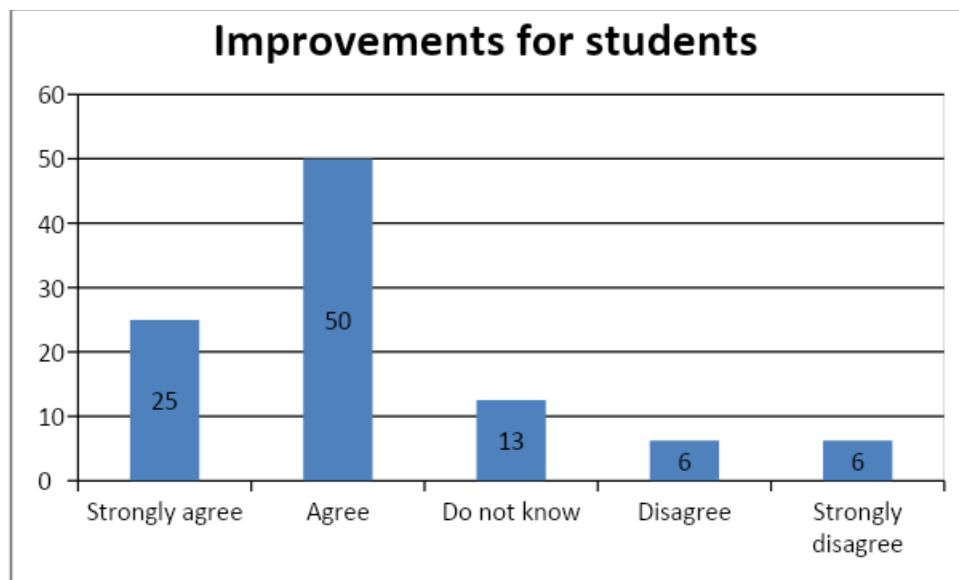


Figure 4:Improvements for students

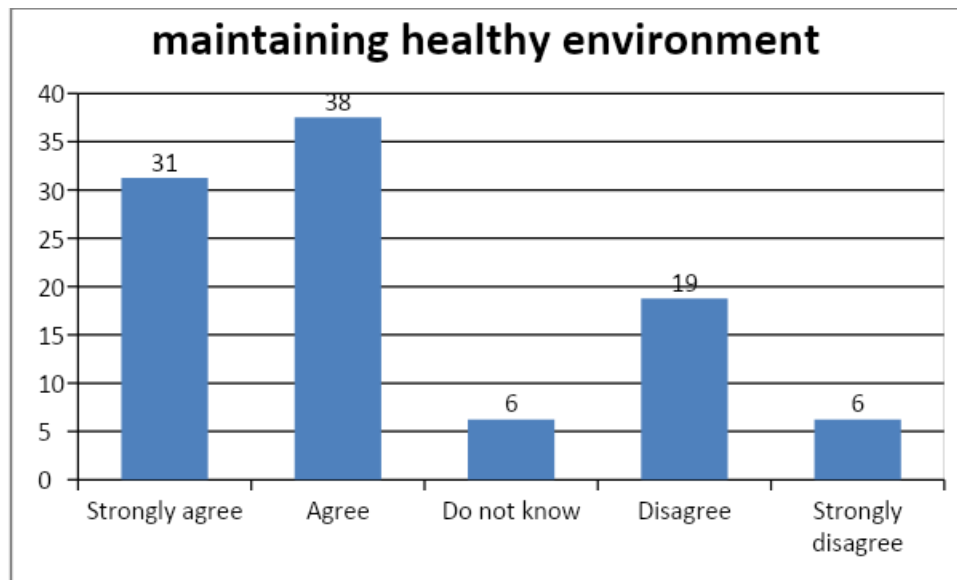


Figure 5: maintaining healthy environment

Appendix 3

Themes	Authors	Journals
Theme 1 Components of VLE	Fernández, L., Ortega, J. and Wisniak, J., 2019. Manojkumar, M.S. and Sivaprakash, B., 2018.	“Extension of the validation method for vapor–liquid equilibrium data to systems with nonvolatile components” VLE Prediction of “Azeotropic Systems using UNIQUAC and UNIFAC Models and Experimental Validation using Othmer VLE Still. Research Journal of Applied Science”
Theme 2 Impact of VLE on students	Herrera, L., 2017 Azimi, H., Tezel, F.H. and Thibault, J., 2018	“Impact of implementing a virtual learning environment (VLE) in the EFL classroom.” “The impact of pH on VLE, pervaporation, and adsorption of butyric acid in dilute solutions.”

Table 6: Thematic analysis