

***Digital Skills
and
Research Methods***
(BMSW4003)

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Table of Contents

<i>Introduction.....</i>	<i>2</i>
<i>Review Existing Research</i>	<i>3</i>
<i>Knowledge and Understanding of the Subject</i>	<i>4</i>
<i>Analysis</i>	<i>5</i>
<i>Practical Application of VLEs.....</i>	<i>10</i>
<i>Required Skills for VLEs</i>	<i>11</i>
<i>Conclusion</i>	<i>12</i>
<i>References.....</i>	<i>13</i>
<i>Appendix</i>	<i>14</i>

Introduction

The role of modern technologies in developing distance learning platforms is increasing day by day. Learners and students can learn new things from anywhere in the world (Weinreich, 2018). Moodle is one of the latest Virtual Learning platforms that enables many features like competency-based education, mobile learning, gamification, interactive online classrooms, etc. Students who learn how to use Moodle from their educational life, it helps them in professional life to use online technologies efficiently (Sartori, 2019). This module reviews the previous literature on Virtual Learning Environment. Then it describes the basic issues of a Virtual Learning Environment. It also analyses the real scenario of E-learning after collecting the necessary data. It demonstrates the practical application of VLE in the University of Wales and the skills requirement of attending online classes.

Review Existing Research

Learning becomes technically influenced by the concept of web 2.0. It has been found that social media platforms like Facebook and YouTube have immense impacts on Virtual Learning Environment. Digital technologies like wikis, web, blogs, instant messaging software like WhatsApp, Messenger, Viber enable users to become a part of online learning communities and to publish and share writings, philosophies, and comments with others (Feebler, 2018). In higher education, social media platforms play a great role by shifting online content from producer-generated to user-generated. Changes in the context of technology-enhanced learning suggested the shift from old-style e-learning, phenomenal of learning entity, and established upon courses to the active cooperation of the learners' community. Social media re-shapes traditional e-learning immensely. Universities of the UK are cultivating and promoting informal learning platform using Social Media. Sometimes informal learning is treated valuable as its characteristics are progressive than traditional e-learning (Spence, 2017).

Virtual Learning Environment in higher education is used effectively to deliver teaching and training materials using a module. Even it assists the progress of communication between teachers and students. Utilisation of VLE WebCT facilitates the continuous interaction for two groups namely trainers or teachers and trainees or students. It is found that VLEs and E-learning become the central supporting system for providing formal education and training during this pandemic. It helps both trainers or teachers and learners to attend classes and training sessions effectively by maintaining social distance. Technology-enhanced E-learning are recognized with the use of Social Media and Video Conferencing platforms also (Vinci, 2018).

Learning platforms under VLE have many features. It has a content management system that creates, stores, provides access to knowledge and materials. It contains curriculum planning and mapping to personalize a student's learning experience. To track the achievement and progress of students it has an administration and learner engagement facility. VLE utilizes different collaboration and communication tools like online notices, wikis, emails, chatting applications, blogs, etc. Virtual Learning enables audio and video conferencing to ensure real-time communication between students and teachers (Prince, 2019).

Knowledge and Understanding of the Subject

Virtual Learning Environment is a web-based platform, which is an educational technology that facilitates the digital aspects of education. It is frequently used in educational institutions like universities and Colleges. It represents necessary activities, resources, and interactions within a course structure and provides for the different stages of assessment. VLE has also integrated with other institutions to facilitate teaching or training. In the English-speaking world, VLEs have been adopted by almost all higher educational institutes (John and Vahlene, 2019). E-learning is made simplified by VLE. Learning and teaching are carried out through broadcasting educational material, communication support, processing of the VLEs, and storage. Virtual Learning Environment is a more efficient technology than a virtual classroom as it facilitates to run online exams, polls, or quizzes. It is helpful for teachers to prepare the course and lesson plans, create, store, and disseminate content (Spotts, 2019).

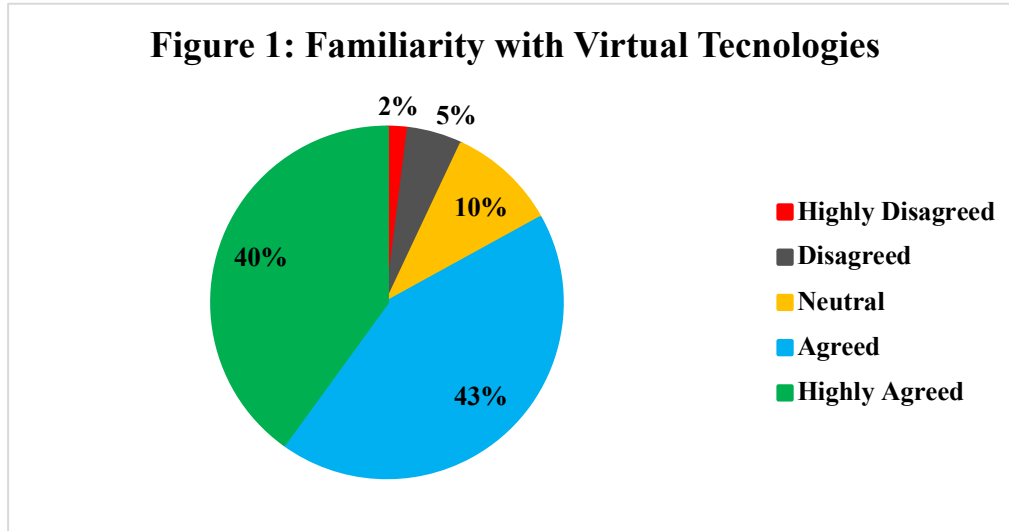
VLEs have some advantages that enable students to learn from home. VLE enables educational institutions to teach not only traditional full-time students but also those who cannot regularly visit the campus due to geographic or time restrictions. Students of the University of Wales can access coursework from anywhere at any time. For example, during this pandemic (COVID-19) student can attend their classes, exams, viva, and presentation by staying at home. So, the use of VLE tools and technology enable the learner to continue their study safely (Green, 2020). When one student logs in to our university website or into the student portal, he is treated as present in the class. It enables himself to discuss with classmates and interact with teachers. Students can get help from the online Student Support Centre to know about classwork and tests. Even students get immediate test results and feedback from course instructors by joining virtual classrooms. Virtual learning ensures effective time management also. Our University of Wales gives opportunities for virtual learning to those students who study besides their job (Sharp, 2019). Thus, Virtual learning makes students skilled in the area of study. In the University of Wales, Moodle is frequently used for VLEs. Moodle stands for Modular Object-Oriented Dynamic Learning Environment. It was developed by Martin Dougiamas in 2002. It is a secured, robust, open, and free platform to deliver and create personalized learning environments that are designed for administrators, learners, and educators. Being an intelligible Learning Management System, it supports training and learnings for different types of organisations and institutions (Hammond, 2017).

Analysis

Moodle becomes the most used Learning Management System in the world that has over 1 lac registered institutions supporting about 2 million learners. It is frequently used in the University of Wales. It is treated as the best Virtual Learning platform because of its scalability and flexibility. There are many reasons for this treatment. Moodle is powerful trainee-oriented tools that create a collaborative learning environment for both teacher and learners. It is suitable for every kind of business, education, government, and non-profit organisations (Gomez and Sarin, 2019).

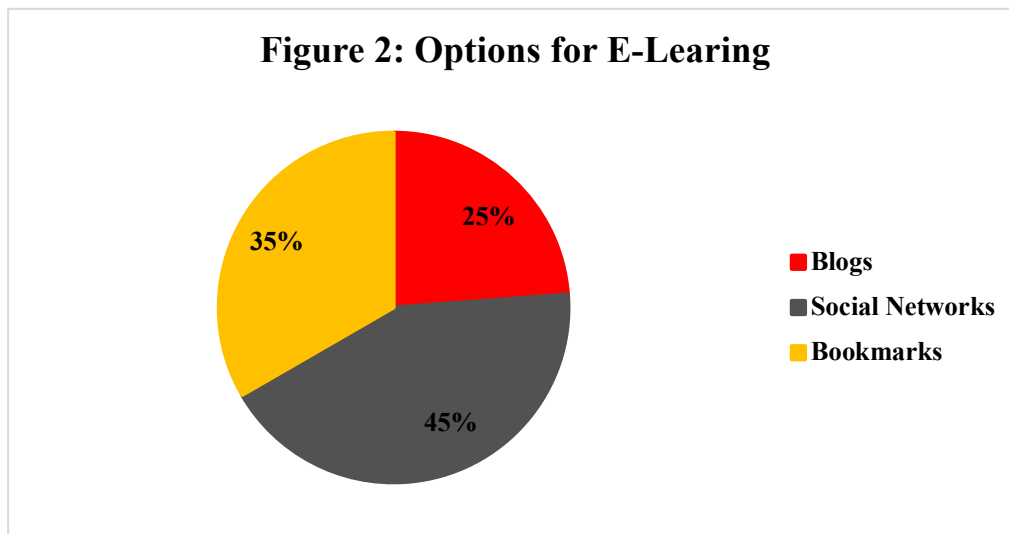
Even it works as a self-hosted tool to support VLEs. More than one hundred languages are enabled in its system. It is popular among students and educators for being an open-source that ensures free downloading, using, and customization. To analyse the VLEs, an online survey was conducted. The questions and responses are given below.

Question 1. I am familiar with the virtual technologies and applications under Web 2.0 likes Blogs, Social Networking Sites, Bookmarks, etc.



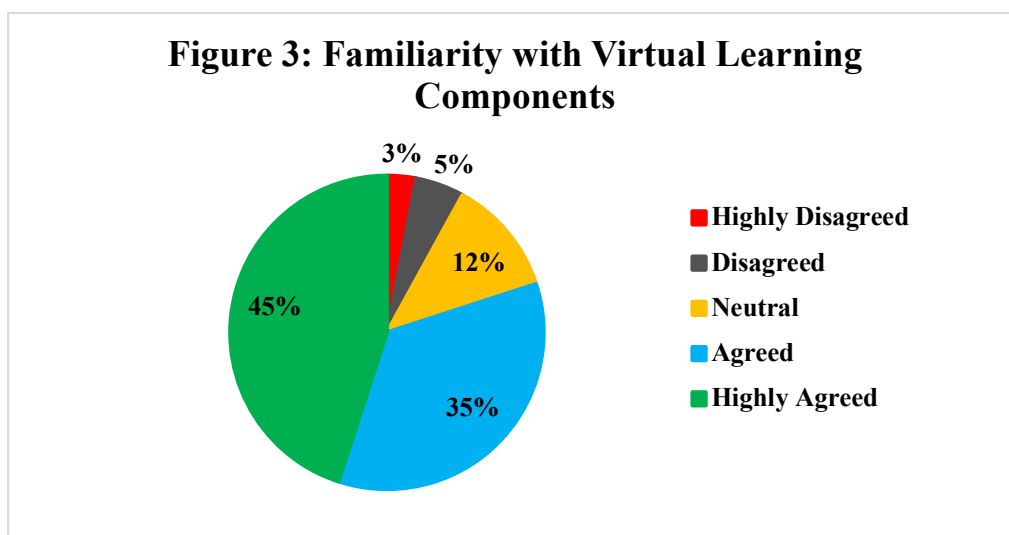
The result states that most of the students are familiar with these. There are a few students who are unfamiliar with virtual technologies.

Question 2. Can you tell me which options you use frequently for E-learning among Blogs, Social Networks, and Bookmarks?



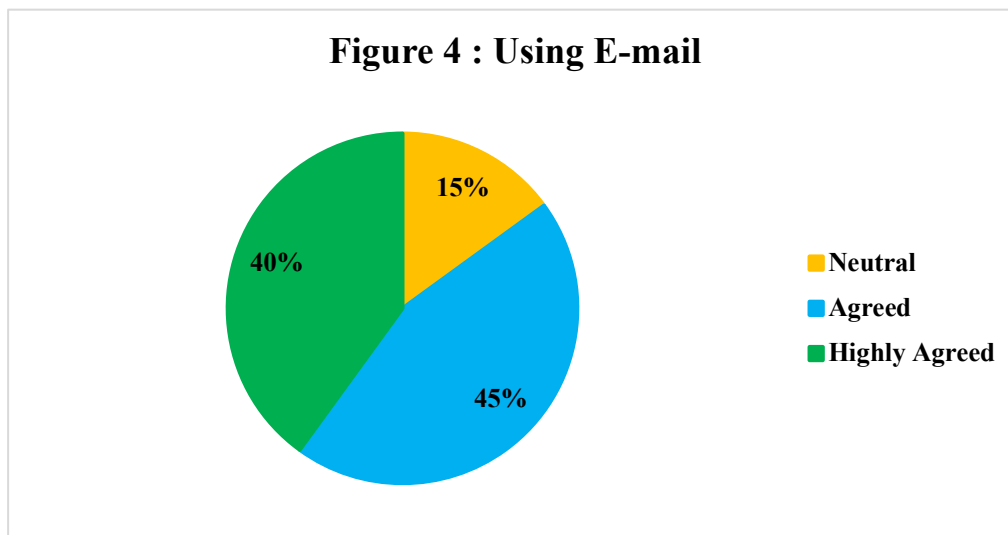
Most of the students answer that they use social networking sites and Bookmarks for E-learning. A few of them visit Blogs for E-learning.

Question 3. I am introduced to E-learning and Virtual Learning Environment components like E-journals, E-books, and E-library catalogues.



It is found that most of the respondents are agreed and highly agreed with the statement. That means most of the students are aware of Virtual Learning Components.

Question 4. E-mail is frequently used by me for education and communication purposes.



It is observed that no student disagreed with the statement. Most of the respondents agreed and highly agreed that they use E-mail as a communication tool.

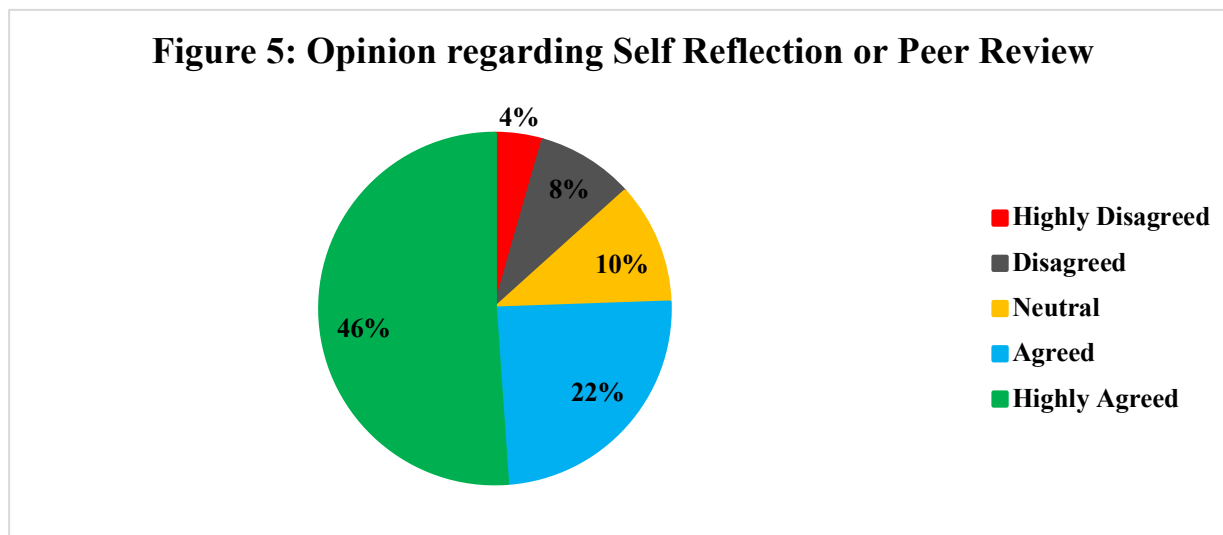
Question 5. How do you think that the concept of Virtual Learning Environment is being applied in your university during this pandemic (COVID-19)?

It was an open-ended and descriptive question. Most of the respondents replied that VLEs are applied to our campus using Moodle, Zoom, and Google to meet applications during this pandemic. E-mail is used extensively to submit classwork, assignment, and presentation.

Question 6. What do you consider about Mobile-based Virtual Learning in higher education?

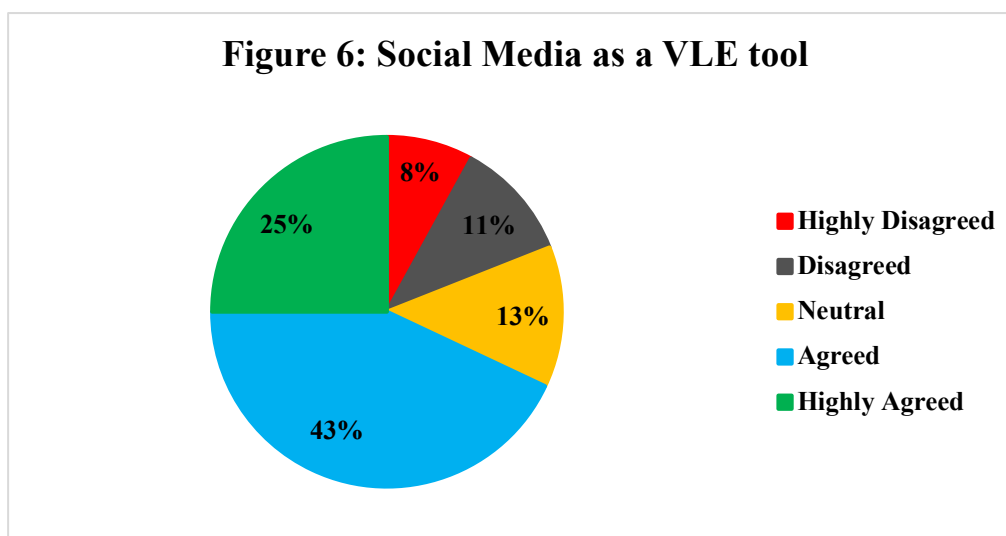
It was an open-ended question and most of the students replied that Mobile-based Virtual Learning helps them immensely as mobile is easy to carry. Application-based mobile learning provides them more collaborative learning method by staying anywhere in the world.

Question 7. I think Self Reflection or Peer Review is helpful to improve my performance when I get feedback from online classes regarding my works.



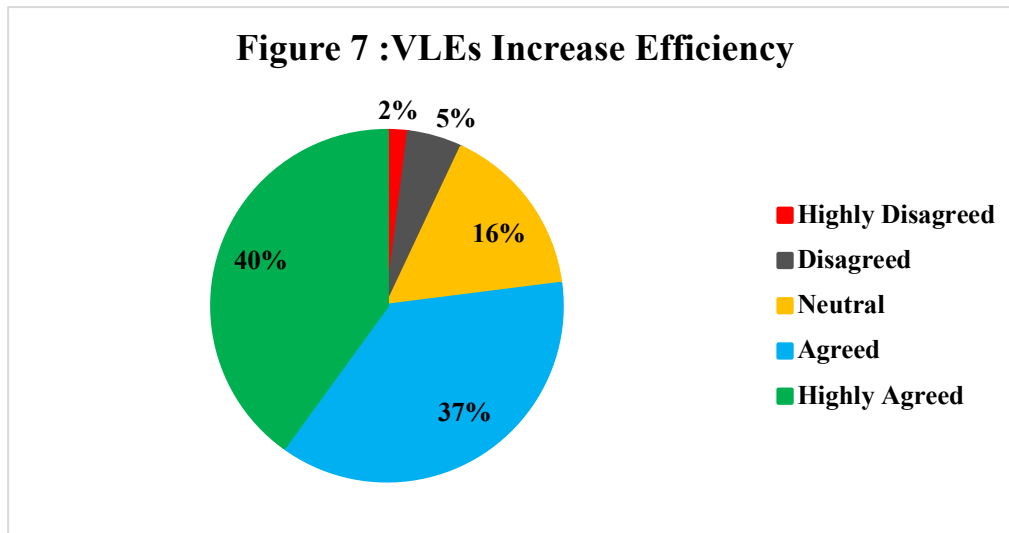
After asking this question, most of the respondents are found highly agreed that online Self Reflection or Peer Review helps to improve their class performance.

Question 8. I think social media is an essential tool in Virtual Learning Environment.



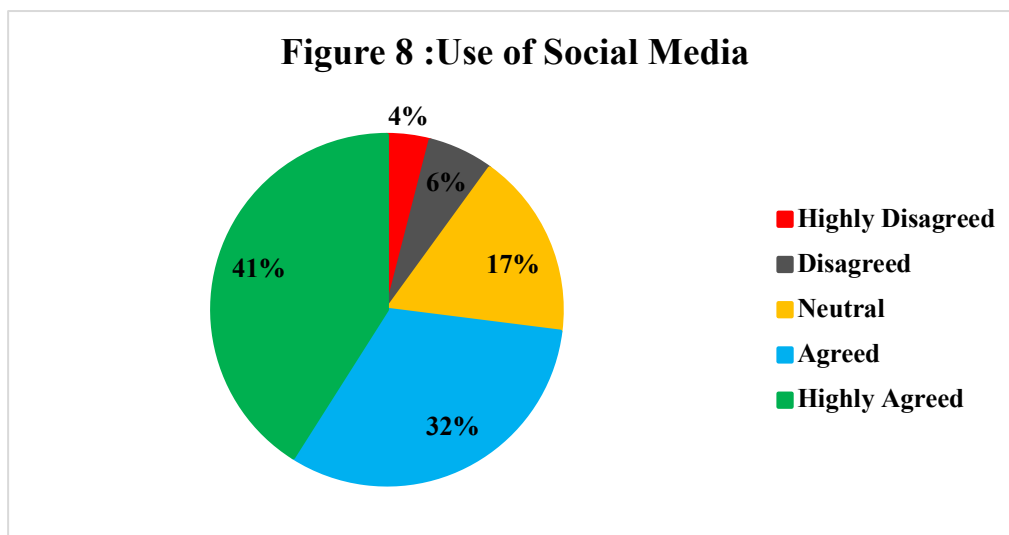
It is observed that most of the students think that social media is an essential tool in Virtual Learning Environment.

Question 9. The use of Virtual Learning Platforms makes me more efficient for my future profession.



Most of the respondents were agreed and highly agreed with the statement. So it can be said that students think that the use of virtual learning platforms makes them skilled enough for their future career or profession.

Question 10. I think the use of Social Media enables us to connect with a larger learner's community globally.



Most of the respondents were highly agreed with the statement. So, it can be said that that most of the students think that Social Media enables them to get connected with a larger community of learners.

Practical Application of VLEs

The University of Wales applies VLEs technology and application efficiently. During this pandemic, situation student can learn their lessons by visiting the University Website. The application of Moodle Software supports the learning of students by arranging interactive classes.

Using Moodle, teachers can add course materials to teach students. Students can access web pages, web links, files, or folders shared on Moodle's drive. Students can upload their assignment files or images through Moodle. Only enlisted students can access the Moodle links as it has a restriction facility to avoid outsiders. Only a learning group of students of the same year or class can access Moodle. Teachers can control which content should be made available to learners. Even course materials get updated continuously and learners get them immediately (Kubicki, 2019). Teachers can take Quizzes and Exams on Moodle. Students also get Marks on Moodle after attending the exam. Moodle's messaging system enables teachers and learners to chat with each other. A group of students can communicate with teachers via course forums on Moodle. To produce reports on student's performance, Moodle monitors the progress of students and store the scores of each learner. Learners can see their grades on the Moodle page (Ingram, 2018). The following pictures demonstrate how outsiders are restricted in Moodle learning groups, how the tasks are distributed among students, how students can complete their online learning activity, and how their grade report is published on Moodle.

Moodle has some other facilities that are enjoyed by students at the University of Wales. Students can collaborate and communicate with their classmates or group mates to accomplish a group task or to discuss a topic. Even they can customize their profile or homepage to links to their individual needs or to tailor information. They can participate in practicing in self-testing for exam preparation where immediate feedback is given related to their answers.

Required Skills for VLEs

Some skills are required for both teachers and students to implement VLEs in an educational institution.

Persistence

This is the biggest key to become successful in Virtual Learning. Students must be patient when they face technical problems. They should seek help from the experts. Learners must attend their classes and exams regularly. Teachers should set a manageable study schedule to keep students active and persistent (Nevo, 2017).

Time-Management

Both teachers and learners must have effective time management skills to create and attend the Virtual Learning Environment. They should fix a time for classes and schedule for quizzes, tests, presentations, and exams. Teachers should review the whole syllabus for defining the time for completing the course. They should provide daily exercises for the students (Sheldon, 2018).

Communication Skill

Student must have communication skills to attend virtual learning. They must know how to seek help from teachers to solve a study related problem. The University of Wales provides various digital technologies to facilitate communication like discussion and chat groups on Moodle, e-mail facility, text messaging and calling via cell phones. A student must know how to use these communication tools properly. They should be aware of using languages with others. Students should talk or converse formally with their respected teachers (Nevo, 2017).

Technical Skill

Students must have basic technical skills to attend VLEs. These include the ability to navigate the Internet, download application software, create new documents or folders online, use a word processing program. University of Wales offers different programs to students for developing such basic technical skills. Besides, students must have basic computer literacy. They should ensure that the hardware and software of their computer meet the basic requirements to access University Websites and E-learning platforms (Sheldon, 2018).

Conclusion

Virtual Learning Environment enables learners and trainees to attend classes and training by staying at home. Modern digital technologies like Moodle, Zoom, Google Meet, Google Classroom makes this Virtual Learning Environment more fruitful. Moodle is a widely used application software that has many features in comparison to other online learning platforms. Moodle is used by the University of Wales to ensure quality education for students. Moodle is an open-source application that helps users to install and use it without bearing any cost. However, both learners and teachers must have the basic skills to use these digital technologies. Computer literacy and basic networking skills are essential to attend virtual learning platforms. Online security is also a concern of Virtual Learning. Moodle is a fully secured technology where users enjoy the customisation and personalisation features.

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Appendix

Student Name: Lidia Temelkovska
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Module Name: Digital Skills and Research Methods
VLE/Questionnaire

Question 1:

I am familiar with the virtual technologies and applications under Web 2.0 like Blogs, Social Networking Sites, Bookmarks etc.

a) Highly Disagreed b) Disagreed c) Neutral d) Agreed e) Highly Agreed

Question 2:

Can you tell me which option you use frequently for E-learning among Blogs, Social Networks and Bookmarks?

a) Blogs b) Social Networking Sites c) Bookmarks

Question 3:

I am introduced to E-learning and VLE components like E-journals, E-books and E-library

a) Highly Disagreed b) Disagreed c) Neutral d) Agreed e) Highly Agreed

Question 4:

E-mail is frequently used by me for education and communication purposes.

a) Highly Disagreed b) Disagreed c) Neutral d) Agreed e) Highly Agreed

Question 5:

How do you think that the concept of VLE is being applied in your university during this pandemic (COVID-19)?

Ans. _____

Question 6:

What do you consider about Mobile-based VL in higher education?

Ans. _____

Question 7:

I think Self Reflection or Peer Review is helpful to improve my performance when I get feedback from online classes regarding my works

- a) Highly Disagreed b) Disagreed c) Neutral d) Agreed e) Highly Agreed

Question 8:

Do you think social media is an essential tool of VLE

- a) Highly Disagreed b) Disagreed c) Neutral d) Agreed e) Highly Agreed

Question 9:

Use of VLP makes me more efficient for my future profession

- a) Highly Disagreed b) Disagreed c) Neutral d) Agreed e) Highly Agreed

Question 10:

Do you think use of Social Media enables us to connect with a larger learner's community globally.

- a) Highly Disagreed b) Disagreed c) Neutral d) Agreed e) Highly Agreed