

Moodle Code: BMSW4003

Moodle: Digital Skills and Research Methods

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Title: Reports Writing

REPORTS WRITING

Title: The impact of virtual learning environment (VLE) - Moodle on student' learning experience at the University of Wales Trinity Saint David London Campus.

Summary of the report:

Digital skills and research methods help to improve students' digital skills within the workplace. It helps to develop awareness of the importance of effective analysis of information and its translation into knowledge. Information and Communication Technologies have become integral to personal and professional life; businesses and governments are increasingly interconnected. Digital technologies are also changing our jobs: While a few decades ago digitization affected only a handful of occupations, now the majority of workers use the internet as part of their jobs in most OECD countries and digital literacy is predicted to become critical important for the vast majority of workers in the future (Berger and Frey, 2016).

My learning experience at the University of Wales Trinity Saint David was an interactive learning experience, virtual classroom uses the internet to have a mutual multimedia experience where one can have video conferences, video lessons and other stimulating learning prospects. Although my learning experience at the university was good but it gave me advantages and disadvantages. My advantage was that it provides an opportunity for me to have little interference in professional life. It is an excellent opportunity for me to look to improve my career and it's special training for me. My disadvantages include distance learning, which does not offer realistic feedback. In the visual classroom situation, a student's routine can be reviewed right away during questions and informal tests. Another weakness associated with virtual learning is that it does not provide the learners with any opportunity to work on spoken communication ability. Although we do talk in the conference meeting in the class, but the lecturer might not know what everyone is doing now of teaching and not everyone in class would talk.

Aims and objectives:

The aims of the research were to confirm the skills set required for a digital skills enhancement Programmed. The digital skills enhanced enable our lecturer to develop their personal digital skills so that they can prepare us for future employment (or progression), and to be competent to deliver ICT up to a certain level if required.

- I confirmed the skill set that should be covered in the virtual learning environment.
- ICT skills expectation that future employers have as a virtual learning student.

- Present interim findings to give early directions to the design and content of the online modules that were built to support skill development.
- Discuss, share and validate, emerging findings and implications of virtual learning design and content with relevant foundation staff and foundation programmed.

Importance of a virtual learning environment:

- **It's flexible:** Online education enables the teacher and student to set their own learning pace, and there's the added flexibility of setting a schedule that fits everyone's agenda. As a result, using online education platform allows for a better balance of work and studies, so there's no need to give anything up. Studying online teaches you vital time management skills, which makes finding a good work-study balance easier.
- **It offers a wide selection of programs:** In a space as vast and wide as the internet, there are infinite skills and subjects to teach and learn. A growing number of universities and higher education schools are offering online versions of their programs for various levels and disciplines, and also a great option for getting an official certificate, diploma, or degree without physically setting foot on a university campus.
- **It is accessible:** Online education enables you to study or teach anywhere in the world. This means there's no need to commute from one place to another or follow a rigid schedule. On top of that, not only do you save time, but you also save money, which can be spent on other priorities. The virtual classroom is also available anywhere there's an internet connection, and a good way to take advantage of this is to travel. For example, if you're studying abroad and want to get a job, online education is a great choice.
- **It allows for customized learning experience:** Online classes tend to be smaller than conventional class sizes. Most of the time, online learning platforms only allow one student at a time, and in almost all cases, this allows for greater interaction and more feedback between you and your tutor. There's often access to very diverse material such as videos, photos, and eBook online as well, and tutors can also integrate into other formats like forums or discussions to improve their lessons.

Literature:

Definitions of virtual learning: A virtual learning environment in educational technology is a web-based platform for the digital aspects of courses of study, usually within educational institutions. They present resources, activities, and interactions within a course structure and provide for the different stages of assessment.

Advantages and Disadvantages of virtual learning include:

ADVANTAGES:

- Personalized learning: Student can learn at their own time and phase.
- Long distance learning
- Enhance collaboration and communication.
- Real-time teaching and learning
- Effective and efficient time management
- It gives students and teachers worldwide exposure.
- Affordable
- Accessed to everyone equally from anywhere and at any time.

- Introduce students and educators to education technology.
- Improve Visualization.

DISADVANTAGES:

- No control over the students or classroom
- No control over the learning atmosphere or environment
- Virtual Classroom requires computers and internet access, which might not be at hand to everyone.
- The risk to the traditional student-teacher collaboration

Methods of carrying out virtual learning:

- Setting up a routine
- The hardware side of things
- Online safety and cyber wellness
- Keeping students motivated and engaged.

Research Methodology:

How the study was designed, however, through the method of setting up a routine and the hardware side of things. Virtual Learning development necessitates a number of activities. They can be broken down into five phases, according to the ADDIE model for instructional design: analysis, design, growth, implementation, and evaluation. The roles mentioned below are typically needed at various stages of the process (though some of them can be merged into a single job profile): a project manager; an instructional designer. The study is designed because it can be used to help students understand material in a different way. The research proposes a methodology for designing distance learning tasks adaptable to the student's learning style. The aim is to achieve more active participation in the subject and an affinity that leads to a better learning experience. Today we are living in a period of continuous evolution in education, in which students need more resources and tools to acquire information and construct knowledge. One such resource is the use of distance learning settings, in which the instructor assigns supplementary tasks to help students comprehend the concepts they've already learned. However, there are occasions when the students are unable to comprehend the material due to the format in which it is delivered, necessitating the development of further options to promote content comprehension by various methods that are more appealing to the student, resulting in increased active participation.

Types of data used in the study:

Data is the collection of raw measurements and has no meaning or value.

The types of data used are primary data and secondary data:

- **Primary data:** Primary data is data that is used empirically, meaning that interpretation of it leads to certain themes or conclusions of it leads to certain themes or conclusions. Interview data and discussion board messages are examples of primary data that were explicitly sought for the purposes of the study. These are data which are collected from the field under control and supervision of an investigator, Primary data means original data that has been collected specially for the purpose of mind which are useful for

current studies as well as future studies. It involves interviews and records, discussion board messages, message statistics, access data, and questionnaire statistics.

- **Secondary data:** The secondary data and discussion board messages are examples of primary data that were explicitly sought for the purposes of study. The secondary data is used to back up the conclusions of primary data. Secondary data is information that was gathered as a “by-product” of the analysis and was not needed for the study. Email messages and the tutor’s log, for example, were discovered as a result of the study. The secondary data can also be seen as a Data gathered and recorded by someone else prior to and for a purpose other than the current project. The secondary data involves less cost, less time and less effort. The secondary data is data that is being reused, usually in a different context by research. Examples are email messages, tutor’s log, and access data for email.

Source:

https://shura.shu.ac.uk/2372/1/A_method_for_analysis_of_data_from_online_education_research.pdf

Population / sample size:

- **Population:** A population is a distinct group of individuals, whether that group comprises a nation or a group of people with a common characteristic. In statistics, a population is the pool of individuals from which a statistical sample is drawn for a study. Thus, any selection of individuals grouped together by a common feature can be said to be a population. It can also be a larger group of people from which individuals are selected to participate in the study.
- **Sample size:** This is the act of choosing the number of observations or replicates to include in a statistical sample. The sample size is an important feature of any empirical study in which the goal is to make inferences about a population from a sample. In practice the sample size used in a study is usually determined based on the cost, time, or convenience of collecting the data, and the need for it to offer sufficient statistical power.
- **Sampling techniques:** Sampling techniques is the name or other identification of the specific process by which the entities of the sample have been selected.

Data analysis: Data analysis can be defined as the process of collecting and organizing data in order to draw helpful conclusions from it. The process of data analysis uses analytical and logical reasoning to gain information from the data.

- **How data was analyzed:** Analysis refers to dividing a whole into its separate components for individual examination. Data analysis is a process for obtaining raw data, and subsequently converting it into information useful for decision-making by users. Data, test hypotheses, or disprove theories. Procedures for analyzing data, techniques for interpreting the results of such procedures, ways of planning the gathering of data to make its analysis easier, more precise or more accurate, and all the machinery and results of (mathematical) statistics which apply to analyzing data.

Software used for the analysis:

- ❖ **Qlik sense:** Qlik sense is a tool for creating interactive reports and dashboards with beautiful charts and graphs. The visualization platform makes data analysis easier than before, allowing you make more informed business decisions in less time.

Source: https://www.qlik.com/us/lp/ppc/qlik-sense-business/campaignid=7013z000001GZGq&utm_source=capterra&utm_medium=referral&utm_Software&utm_campaign=Capterra_PPC

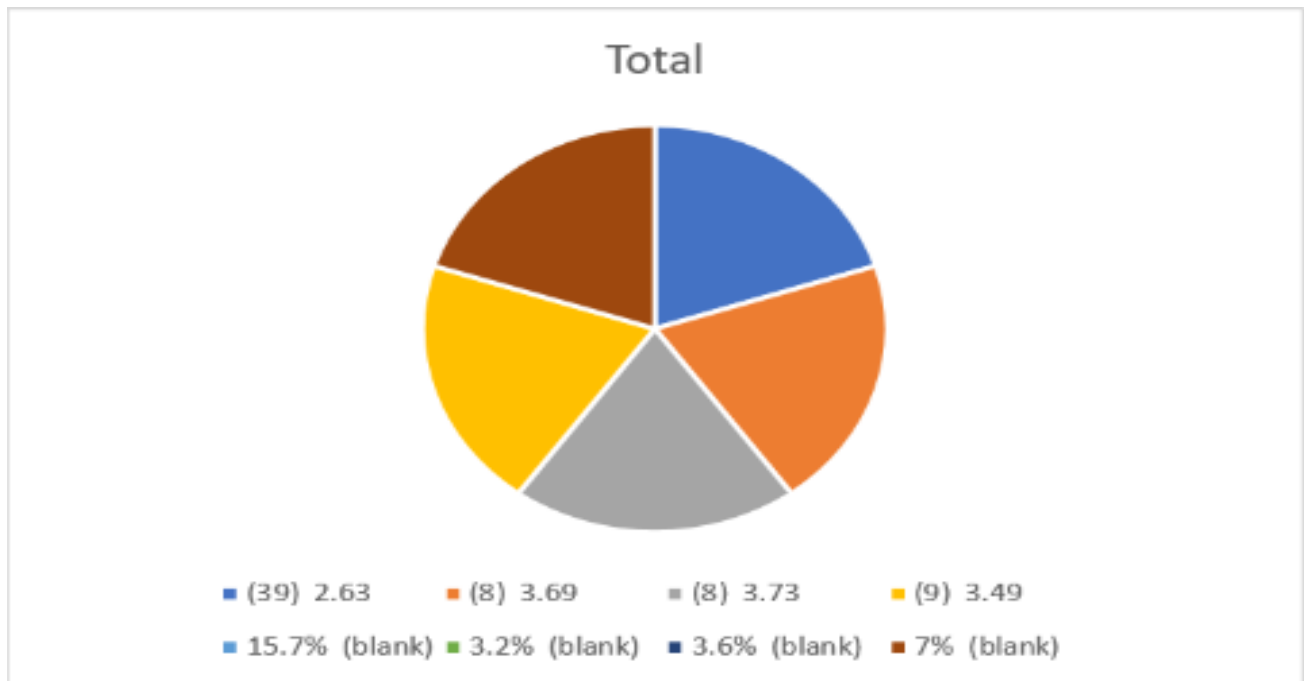
- ❖ **Y42:** This is an enterprise-level data stack with the simplicity of spreadsheets. Power data-driven decisions without the pain of maintaining multiple tools.

Ethical consideration:

The research project's aim is to help learn more by giving you a deeper understanding of research and how it affects practice. However, you will frequently be asked to seek input from people who are not usually involved in the educational process as part of your study (e.g., average consumers, managers, employees, etc.).

Data interpretation from graph and table generated from Microsoft Excel:

Answers options	Strongly agree	Disagree	Neither agree or disagree	Agree	Strongly Agree	Mean Score
1.) Does student prefer online learning	(8) 3.2%	(13) 5.2%	(61) 24.6%	(133) 53.6%	(33) 13.3%	3.69
2.) Does student prefer campus classes.	(9) 3.6%	(19) 7.7%	(77) 31.0%	(127) 51.2%	(16) 6.5%	3.49
3.) Moodle is an important and valuable aid to me in my studies	(8) 3.2%	(14) 5.6%	(43) 17.3%	(155) 62.5%	(28) 11.3%	3.73
4.) Moodle improves the quality of my learning.	(39) 15.7%	(80) 32.3%	(68) 27.4%	(55) 22.2%	(6) 2.4%	2.63
Total respondents as percentage of response count.	7%	13%	25%	47%	8%	



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