

DIGITAL SKILLS AND
RESEARCH METHODS

(BMSW4003)

STUDENT: ADRIANA TOMA 2113309

LECTURER: BALENDRAN KANDASAMY

Contents

Introduction	3
Main Body	3
Rationale	3
LITERATURE REVIEW	3
RESEARCH METHODOGY	6
QUESTIONNAIRE	7
CONCLUSION	17
References	18

Introduction

Digital talents are practises and skills that an individual must possess in order to bring about new developments and manage organisational performance. To access and handle information, digital skills require the use of digital devices, communication software, and a network. It is critical for any firm to identify what its customers want and how they may be fulfilled so that appropriate products and services can be supplied (Azarenko and et. al., 2018) (Johnston, 2020). The digital skills are technology-related abilities that are acquired via the use of electronic devices and aid in the management of information. The purpose of the report is to determine the influence of a virtual learning environment on students' learning experiences. The report includes a rationale, goals, and objectives, as well as a literature review. Finding and analysing work-related talents and competencies.

Main Body

Rationale

The goal of doing research is to have a better understanding of digital abilities and how they affect student development. By enrolling in colleges and universities, students are able to take regular lessons. It is critical that each student participate in educational courses that can aid in the development of work-related skills and talents. The current study is being examined in order to improve and add to existing information. This also aids in understanding how to use digital technology to enhance abilities and learning opportunities. This improves the performance and production of the company (Perera Muthupoltotage and Gardner, 2018).

Research Aims and Objectives

Aims

“The purpose of this study is to determine the effects of a virtual learning environment on student learning.”

Objectives

- To figure out what digital abilities are and how important they are.
- To define virtual learning in the context of education.
- To determine how virtual learning affects students' learning.

Research Questions

- What are the meanings and ideas of digital skills?
- What does the term "virtual learning" signify in the context of education?
- What effects does virtual learning have on students' learning?

LITERATURE REVIEW

To determine the concepts and significance of Digital skills.

According to Bernacki, Vosicka and Utz, (2020) is the best year yet. Individuals utilise digital skills as a key practise and part of their education to improve their knowledge and abilities. For decades, digital skills have been viewed as vital for the workplace, where it has become increasingly crucial to employ since it aids in the implementation of changes. Electronic equipment has now become a component of study since without it, students would be unable to complete their education (Bernacki, Vosicka and Utz, 2020). Computers, servers, mobile phones, servers, and electronic communications are all tools that are used to successfully handle all processes and activities. It has become critical for all students to use digital skills because they help to improve work skills and abilities. In other words, digital skills are a means of increasing a student's learning, providing an effective collaborative classroom environment, and advancing a student's career. This can help students be more productive by reducing the cost and time, resulting in better results.

To state the meaning of Virtual learning in education field.

According to Cervi, Simelio and Tejedor Calvo, (2021), VLE stands for Virtual Learning Environment, which refers to learning via computer and internet, both within and outside of educational institutions' facilities. It is critical for learners to create use of technological technology that may assist them in gathering knowledge and applying it to their studies and employment. It has been observed that students who reside in another nation and wish to continue their studies at a different university may benefit from the usage of a Virtual Learning Environment, which can assist in the collection of information (Cervi, Simelio and Tejedor Calvo, 2021). Learners might as well have digital and technology abilities in order to acquire information using computers, laptops, tablets, and other electronic devices. Individual and group work will be productive and will aid in the development of students' future talents. People utilise VLE to feel liberated by taking classes and to advance their careers by managing all work and activities.

To identify the impacts of Virtual learning on students.

Learning, according to Dreimane, (2019), is the action of obtaining something new and different that aids in the management of activities and functions. It is critical for all students to use the VLE since it allows them to develop their present knowledge and abilities. It will be a terrific chance to run business and boost performance if pupils have digital skills and abilities. This has a good influence on student learning since it encourages them to acquire new knowledge and abilities in order to finish the allotted job and sustain greater performance (Dreimane, 2019). The epidemic put pressure on millions of students in schools, colleges, and universities throughout the world to engage in Virtual Learning, in which students use digital devices to improve their learning and sustain greater performance. Some education centres

and coaching firms continue to provide online programmes in which students can participate in each session. The following are some of the effects of VLE on students:

This allows students to participate in high-quality learning: VLE is advantageous to students because it prepares them to participate in various courses and learning via the use of the internet and computers. This can aid in improving student learning and properly managing all functions.

Any time any pace: VLE has a beneficial influence since it allows students to access learning at any time and at any pace by registering themselves. Students can also record their lessons and learn more, which can aid in the development of work skills (Reisoğlu and Çebi, 2020).

Synergy – The digital and internet-based classes use students' digital abilities to build a connection between them and their instructors, and it aids in the management of all functions and activities. This also aids in the regulation of their learning and experience by efficiently controlling all activities.

This helps to introduce new technology: Individuals use an online programme by enrolling in several classes that help them finish tasks and manage their time. This aids in the development of a student's career and the effective management of functions.

RESEARCH METHODOGY

Research methodology is a broad phrase that refers to how an individual or researcher develops their knowledge and abilities in order to finish a certain study. The technique explains how researchers get data and sustain performance by analysing the market. The following is an approach for assessing the influence of a VLE on the learning experience:

Philosophy: This refers to an individual's ideas and perceptions about a certain issue as they grow understanding and abilities. This is an example of information authentication that is both relevant and suitable. This takes into account the ideas of interpretivism and positivism. In light of recent research, positivism is a concept that can aid in the collection of relevant and acceptable data about digital abilities.

Research strategy: This may be described as a step-by-step strategy that directs one's thoughts and actions. This is one of the most important components of research, that would be used to conduct surveys and collect data. This includes conducting interviews, doing surveys, conducting a case study, conducting an experiment, and conducting a systematic literature review to support the study. The current study is on the effects of virtual learning on student learning, and the researcher is employing a survey approach to gain insight into people's perceptions. Researchers can help their students improve their understanding and management skills by using digital learning (Sepasgozar, 2020).

Choices of method: Individuals can utilise this technique to deepen their insight and knowledge in regard to working. In this instance, a researcher's ability to do analysis and make the best judgement may be hampered. It is critical for each individual to do a market survey and conduct their research. Quantitative and qualitative methodologies are two types of research techniques that are used for diverse purposes and to assist a study. The qualitative technique is used to collect theoretical information about a subject that can aid in the management of functions and activities. On the other hand, researchers who support their work employ quantitative methods to acquire statistical and practical knowledge. In the current study, the researcher employs a quantitative technique that aids in the collection of data and provides a practical presentation that aids in the study and decision-making process.

Time Horizon: Each job and task is associated with a certain time period, making it necessary to organise work according to this time frame. It has been observed that if work is divided among individuals, it should be finished within a specified time frame to support working. This includes cross-sectional and longitudinal horizons that can assist in completing the task in a timely manner. The present study is focused on students' digital abilities and research methods, since it has become increasingly necessary for them to use electronic devices to continue their studies and improve their learning environment. In terms of contemporary research, researchers are using a longitudinal horizon that may assist them perform effectively and have a better grasp of a topic. This will aid in the gathering of

information from many sources and the development of knowledge in regard to a certain issue (Spiller and Tuten, 2019).

Data collection and Analysis: Conducting research and analysing data is an essential strategy that individuals utilise to assist them in making the best decision possible. This is a continual procedure in which data is gathered in various forms to aid in the completion of the research and management of the functions. It became critical for researchers to employ a data collection tool since it aids in the management of performance by collecting data. Primary and secondary data gathering are the two types of data collecting. The primary source of data collecting is when information is gathered through firsthand sources such as surveys, interviews, feedback forms, observation, and others. Secondary sources, on the other hand, are when information is gathered from previously acquired sources and has a direct impact on activities and functions. The current study examines the influence of virtual learning on students' ability to accomplish work and studies. The research was centred on technological gadgets that aid in student learning and experience. In connection to VLE, researchers employ primary and secondary research methods to obtain knowledge and sustain greater performance. This research aids in the development of a thorough understanding of and management of all activities.

Sampling: This may be defined as the process of doing research through surveying and studying a big group of people. It is critical for pupils to employ digital skills and abilities that will aid in the development of working abilities and the timely completion of the assignment. In regard to current VLE study, the researcher has chosen a random sample strategy that can assist in selecting people from a big population while maintaining good activities. Probability and non-probability sampling techniques are used. To choose pupils, the researcher employed a probability strategy. There are a total of 17 contestants who were chosen at random (Zhao, Llorente and Gómez, 2021).

QUESTIONNAIRE

What is the significance of Moodle for students?
a) Not Important
b) Important
c)Very important

Please rate your experience with Moodle on a scale of 1 to 5.
a) 1
b) 2

c)3
d) 4
e) 5

How frequently do you use Moodle to help you learn?
a) Daily
b) Weekly
c) Annually
d) Monthly

Do you find it challenging to use virtual learning?
a) yes
b) No

Would you tell someone else about digital learning?
a) Highly recommend
b) Recommend
c) Not recommend

Do people utilise virtual learning to increase their learning skills and abilities?
a) yes
b) No

Virtual learning, in your opinion, is beneficial?
a) yes
b) No

I believe that the virtual learning platform is simple to utilise.
a) Strongly agree

b) Agree
c) Disagree
d) Strongly disagree

What effect does virtual learning have on students' learning?
a) Bad
b) Very bad
c) Good
d) Very good

How many hours per day and week do you anticipate youngsters and students to spend on online coursework?
a) 3-4 hours per day
b) 7-8 hours per day

Timestamp	How moodle is import	On a sca	How often do you use m?	Do you find virtu	Would you recom	Does virtual learning is u	According to you, virtual	I think the virtual learning	How does virtual learning	How many hours do you expect kids and students to spend on online coursework each day		
12/29/2021 11:20:27	Important	3	Weekly	Yes	Highly recommend	Yes	Yes	Strongly agree	Good	7-8 hours per day	Option 1	Option 1
12/29/2021 11:21:05	Not Important	3		Yes		Yes	No	Strongly agree	Very bad	3-4 hours per day	Option 1	
12/29/2021 11:21:21	Very important	4	Monthly	No	Highly recommend	Yes	Yes	Strongly agree	Very good	3-4 hours per day		
12/29/2021 11:21:27	Not Important	1	Annually	Yes	Not recommend	No	No	Disagree	Very bad	0 hours	Option 1	Option 1
12/29/2021 11:21:30	Very important	4	Weekly	No	Recommend	Yes	Yes	Agree	Good	3-4 hours per day	Option 1	Option 1
12/29/2021 11:21:30	Very important	4	Weekly	No	Highly recommend	Yes	Yes	Strongly agree	Good	3-4 hours per day		
12/29/2021 11:21:36	Not Important	4	Weekly		Highly recommend	Yes	Yes	Strongly agree	Good	7-8 hours per day		Option 1
12/29/2021 11:21:54	Very important	5	Monthly	No	Highly recommend	Yes	Yes	Strongly agree	Very good	3-4 hours per day	Option 1	
12/29/2021 11:22:06	Not Important	5	Weekly	No	Highly recommend	Yes	Yes	Agree	Very good	3-4 hours per day	Option 1	Option 1
12/29/2021 11:22:35	Very important	4	Weekly	No	Recommend	Yes	Yes	Agree	Good	3-4 hours per day	Option 1	Option 1
12/29/2021 11:22:48	Very important	4	Daily	No	Highly recommend	Yes	Yes	Strongly agree	Good	3-4 hours per day	Option 1	Option 1
12/29/2021 11:23:03	Very important	1	Daily	No	Highly recommend	Yes	Yes	Agree	Very good	3-4 hours per day	Option 1	

12 responses



Accepting responses ☒

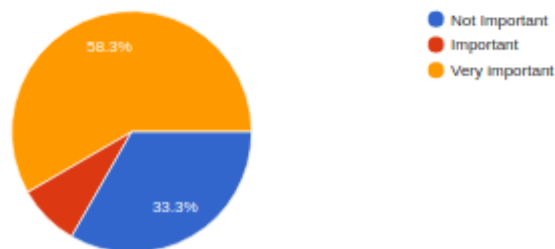
Summary

Question

Individual

How moodle is important for students?

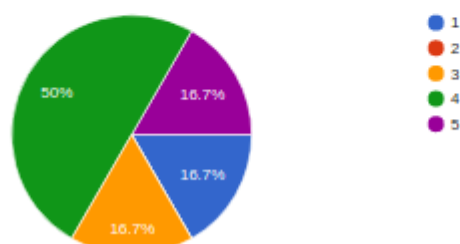
12 responses



On a scale from 1 to 5 , rate your experience about using moodle.

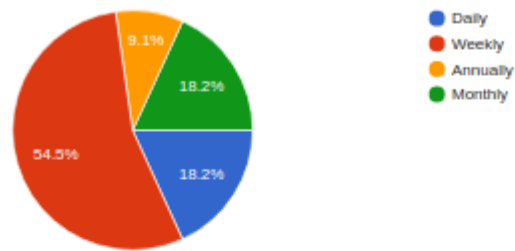


12 responses



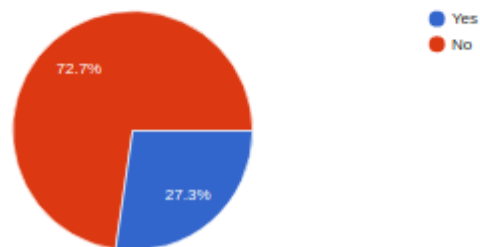
How often do you use moddle for your learning?

11 responses



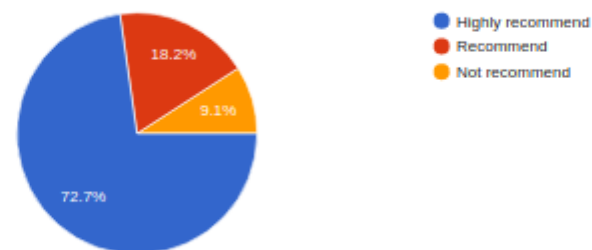
Do you find virtual learning difficult to use?

11 responses



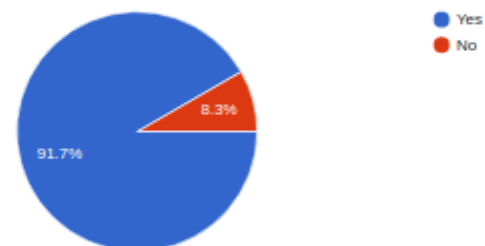
Would you recommend digital learning to someone else?

11 responses



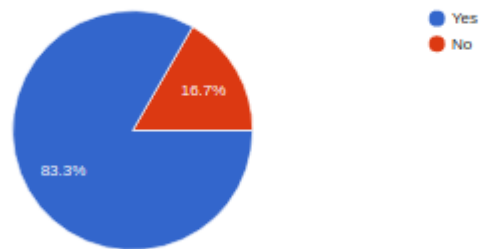
Does virtual learning is used by people to improve their learning skills and abilities?

12 responses



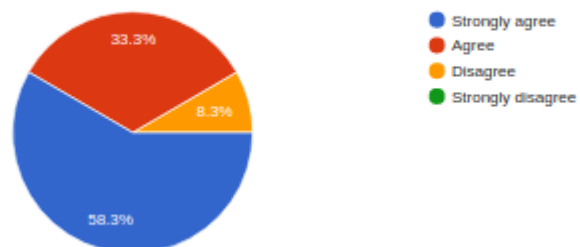
According to you, virtual learning is beneficial ?

12 responses



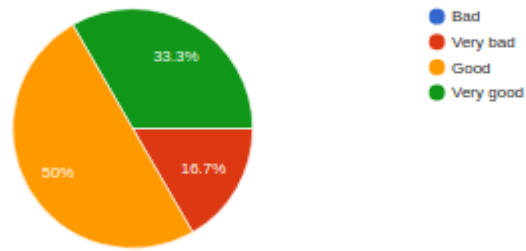
I think the virtual learning platform is easy to be used.

12 responses



How does virtual learning impact the learning of students?

12 responses

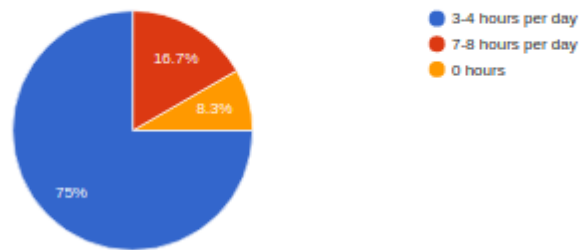


How many hours do you expect kids and students to spend on online coursework each day and each week?

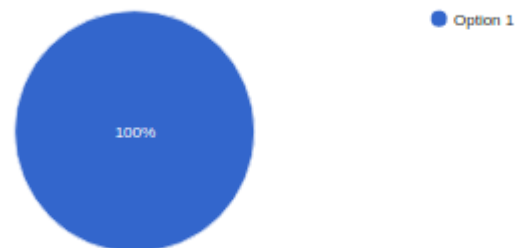
12 responses



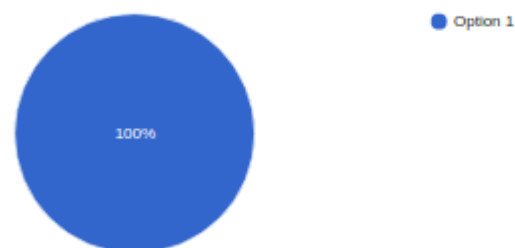
Copy chart



9 responses



7 responses



How moodle is important for students?

- ☐ Not Important
- ☐ Important
- ☐ Very important

On a scale from 1 to 5 , rate your experience about using moddle.

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5

How often do you use moddle for your learning?

- ☐ Daily
- ☐ Weekly
- ☐ Annually
- ☐ Monthly

Do you find virtual learning difficult to use?

- ☐ Yes
- ☐ No

Would you recommend digital learning to someone else?

- ☐ Highly recommend
- ☐ Recommend
- ☐ Not recommend

Does virtual learning is used by people to improve their learning skills and abilities?

- ☐ Yes
- ☐ No

According to you, virtual learning is beneficial ?

- ☐ Yes
- ☐ No

I think the virtual learning platform is easy to be used.

- ☐ Strongly agree
- ☐ Agree
- ☐ Disagree
- ☐ Strongly disagree

How does virtual learning impact the learning of students?

- ☐ Bad
- ☐ Very bad
- ☐ Good
- ☐ Very good

How many hours do you expect kids and students to spend on online coursework each day and each week?

- ☐ 3-4 hours per day
- ☐ 7-8 hours per day
- ☐ Other: _____

CONCLUSION

According to the research, digital skills are technological and online abilities that students utilise to increase their learning via the use of computers, the internet, and mobile phones. It is necessary to take part in various courses and manage productivity in order to increase student learning.

References

Books and Journals

- Azarenko, N.Y., Mikheenko, O.V., Chepikova, E.M. and Kazakov, O.D., 2018, September. Formation of innovative mechanism of staff training in the conditions of digital transformation of economy. In *2018 IEEE International Conference" Quality Management, Transport and Information Security, Information Technologies"(IT&QM&IS)* (pp. 764-768). IEEE.
- Bernacki, M.L., Vosicka, L. and Utz, J.C., 2020. Can a brief, digital skill training intervention help undergraduates "learn to learn" and improve their STEM achievement?. *Journal of Educational Psychology*, 112(4), p.765.
- Cervi, L., Simelio, N. and Tejedor Calvo, S., 2021. Analysis of journalism and communication studies in Europe's top ranked universities: Competencies, aims and courses. *Journalism Practice*, 15(7), pp.1033-1053.
- Dreimane, S., 2019. Gamification for education: Review of current publications. *Didactics of smart pedagogy*, pp.453-464.
- Johnston, N., 2020. The shift towards digital literacy in Australian university libraries: Developing a digital literacy framework. *Journal of the Australian Library and Information Association*, 69(1), pp.93-101.
- Perera Muthupoltotage, U. and Gardner, L., 2018. Analysing the relationships between digital literacy and self-regulated learning of undergraduates—a preliminary investigation. In *Advances in information systems development* (pp. 1-16). Springer, Cham.
- Reisoğlu, İ.L.K.N.U.R. and Çebi, A., 2020. How can the digital competences of pre-service teachers be developed? Examining a case study through the lens of DigComp and DigCompEdu. *Computers & Education*, 156, p.103940.
- Sepasgozar, S.M., 2020. Digital twin and web-based virtual gaming technologies for online education: A case of construction management and engineering. *Applied Sciences*, 10(13), p.4678.
- Spiller, L. and Tuten, T., 2019. Assessing the pedagogical value of branded digital marketing certification programs. *Journal of Marketing Education*, 41(2), pp.77-90.
- Zhao, Y., Llorente, A.M.P. and Gómez, M.C.S., 2021. Digital competence in higher education research: A systematic literature review. *Computers & Education*, 168, p.104212.