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Digital Skill and Research Method

Abstract

The recent pandemic situation has affected the institutions and their overall operations. In the same ways, the learning environment is also highly affected. The use of VLE in the University of Wales Trinity Saint David London Campus in order to support the learning environment has been the main focus of this research. This research has brought out the multiple techniques and methods through which VLE helps the students to support their education system.

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1. Introduction

1.1 Research Title

The impact of VLE process on the development of skills of the students- A research on University of Wales Trinity Saint David London Campus

1.2 Rationale

Virtual Learning Environment is a technologically advanced method that supports the learning procedures followed by the students. The education system has been highly affected in the recent pandemic situation and in order to overcome the challenges the use of VLE is the best-served method. Conducting research on this topic will allow me to support my technological knowledge through which I can improve my learning procedures in academics. Besides this, the prime reason for selecting this topic is that it will allow me to understand the technological aspects through which the learning environment can be improved.

1.2 Objectives

Aim: To understand the role of the VLE in developing the critical thinking ability of the students of the University of Wales Trinity Saint David London Campus.

Objectives:

- a) To determine the several tools that has been consist in the Virtual Learning Environment.
- b) To identify the influence of VLE on developing the skillset of students.

c) To examine the implementation of critical thinking ability in developing the learning process of the students.

2. Literature Review

2.1 Introduction

2.1.1 Several tools that have been consisted in the Virtual Learning Environment

Several kinds of tools are used in virtual learning process like audio-visuals, interaction, feedback etc. Interaction is one of the essential aspects of VLE that allow the students to enhance their existing skills (Dillenbourg, et.al, 2016, pp. 3-18). Further, it also helps the students to stay attentive in the classroom that allow them to fulfil their long- term goals as well. helps in the successful growth of their career. Not only that, feedback is also important for the students as it allows them to know their weak and strong areas. An effective feedback process allows the students to rectify their mistakes. So that the students are able to avoid their repeated mistakes effectively. In this manner, they are able to stay aware of their mistakes (Madjidi, et.al, 2019).

2.1.2 Influence of VLE on developing the skillset of students.

Virtual learning is one of the effective platforms that allow the students to get positive learning experiences. In VLE platforms teachers use various kinds of tools like power-point presentations, maps, diagrams etc that help the students to understand the topic effectively (tophat, 2020). Further, it creates encouragement among the students. With the help of this platform, the students are able to think about the problems in a critical way and also able to find out numerous ways to fix the problem. It helps the students to enhance their critical thinking skills that support their future objectives (Cuthell, 2017).

2.1.3 Implementation of critical thinking ability in developing the learning process of the students

Critical thinking is referred to as the capability of students that helps them to think in a systematic and organised manner in order to recognise the connection between the facts and ideas (Butterworth and Thwaites, 2018). Along with that, it allows the students to conduct an in-depth analysis of the challenges, this helps to enhance their existing skills and knowledge. This skill allows the students to make the right decisions that help in the successful growth of their careers. Further, it allows the students to express their thoughts within the classroom. Moreover, it helps the students to share their confusions with the teachers and clear out their misunderstandings if any (Tomaszewski, 2021).

2.2 Summary

VLE is a technologically advanced online platform that helps students to get up to date information regarding a particular subject matter. In the above section, it has been discussed that how the students are able to enhance their critical thinking skills with the help of the VLE platform. Further, it has also been described several types of tools that help the students to enhance their existing skills.

3. Methodology

3.1 Introduction

Research methodology is the set of procedures that are used for selecting, identifying, processing and analysing the methods and techniques that are required to make an effective framework for research. In this particular research, there will be data collection and analysis, sampling for collecting the data and guidelines that must be followed in the data collection process. The specific steps for developing the framework are given below.

3.1.1 Data collection tools and techniques

This is referred to the methods of collecting data and the way of gathering the data for the successful progression of the research. The student has collected both secondary and primary data from different sources that have helped him to get an authentic result (research-methodology, 2021). The primary data has been collected from the conducted survey and this set of data has provided the student real-time data (formpl, 2021). The secondary data has been gathered from the journals, books and articles which have given him authentic information as these are already approved and ethically correct. The result has been more specific as the student has used both kinds of datasets (Johnston, 2017, pp.619-626).

3.1.2 Sample size

There has been a survey which has been held on the students of the University of Wales Trinity Saint David London Campus. There are two types of sampling techniques in which the student has chosen simple random sampling for getting truer outcomes from the dataset (Martino, et al., 2018). The individuals for the survey have been selected randomly and they have chosen the answers to the questionnaire as they wanted. There have been 10 individuals involved in the survey who had

been selected from a population. In this way, the student has got benefited from the result of the survey as it has been more authentic and not biased (statisticshowto, 2021).

3.1.3 Data analysis

This is the process of evaluating the data that has been collected by the student in the survey. In this research, the student has used the mixed method and used both the qualitative and quantitative data (McLeod, 2019). The qualitative data helped the student to have an understanding of the variety and characteristics of the data which has given the flexibility to the research. The quantitative data shows the numbers and content of the data which helps to do statistical analysis of the collected data (fullstory, 2021).

3.1.4 Ethical consideration

The student has maintained all the regulations and guidelines by taking consent from the students regarding the primary data collection process. The collected data and the information of the survey responders have been protected with unique IDs and strong passwords. Along with that, the student has followed the Data Protection Act to conduct the survey in an ethical manner (Hammer, 2017).

3.2 Summary

The tools and techniques that are required for developing an effective methodology have been discussed above. Moreover, the above discussion has demonstrated some methods and procedures that have been utilised by the student to get an authentic outcome from the research.

Questionnaire:

Refer to appendix 2

4. Data Analysis

4. 1 Primary Data Analysis

1.

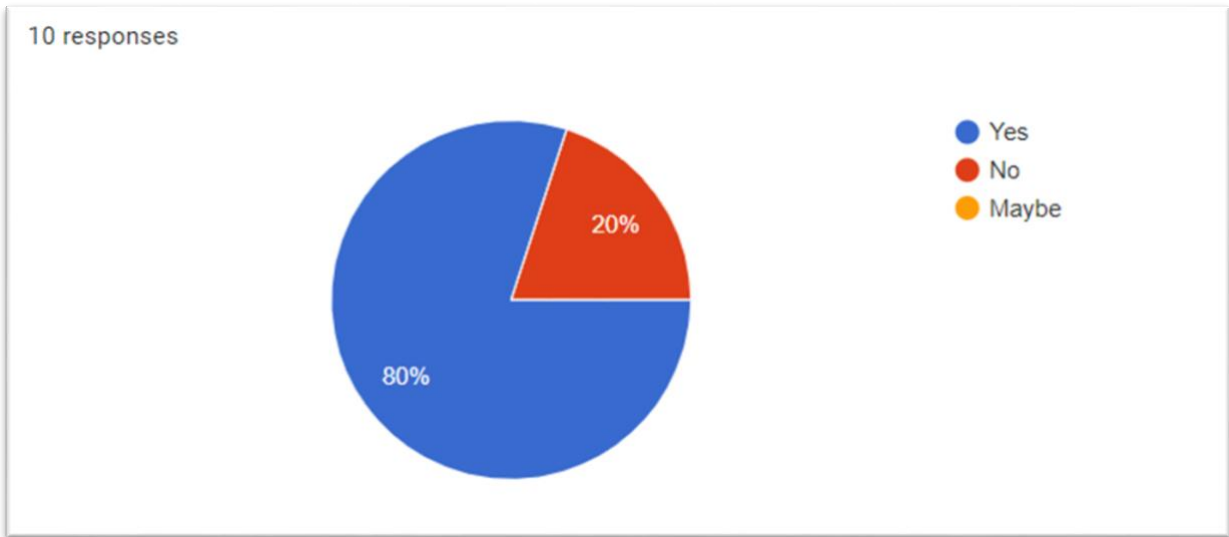


Figure 1

Source: (docs.google, 2021)

Analysis: From the response, it can be deciphered that 80% of the students think that the VLE has helped in supporting the education system in a pandemic situation. Whereas 20% of the respondents stated that it has not helped in supporting the situation.

2.

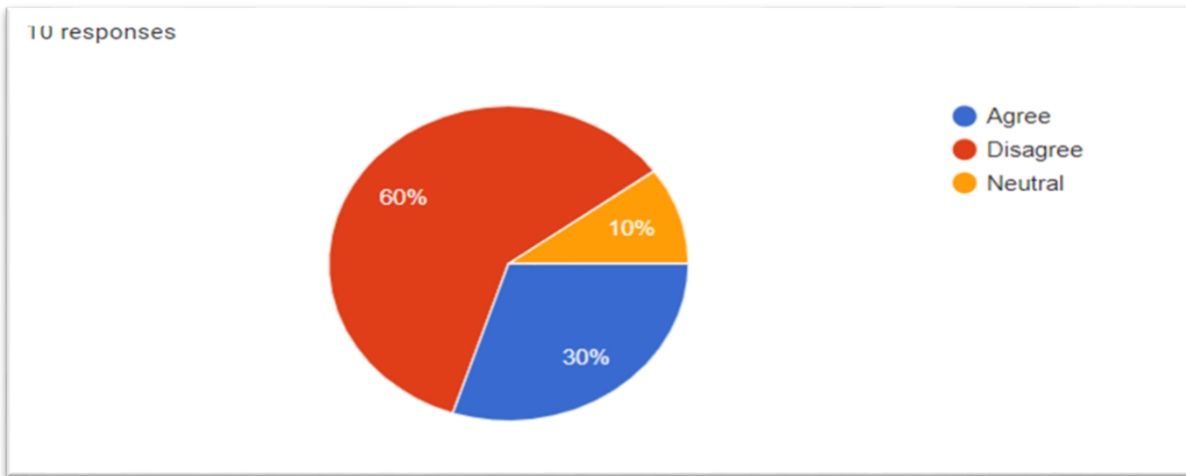


Figure 2

Source: (docs.google, 2021)

Analysis: 60% of the respondents have stated that VLE is not an effective method through which the skills of the students can be improved. Whereas 30% of the respondents think that it helps in supporting the skillsets. Only 10% of them were not sure regarding the outcome.

3.

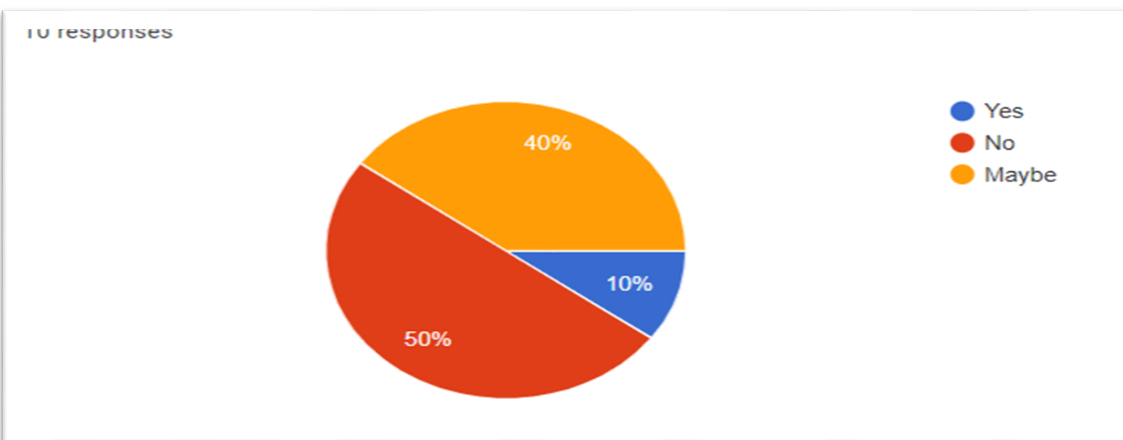
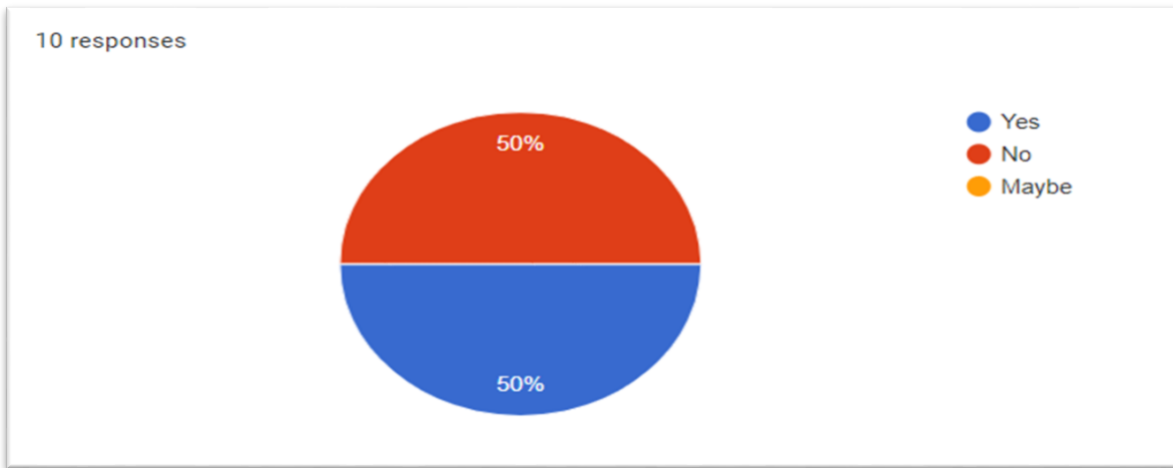


Figure 3

Source: (docs.google, 2021)

Analysis: 50% of the respondents stated that VLE does not reduce the stress of the students. Whereas only 10% agreed that it reduces the level of stress. Apart from that, 40% of the respondents were unsure about this question.

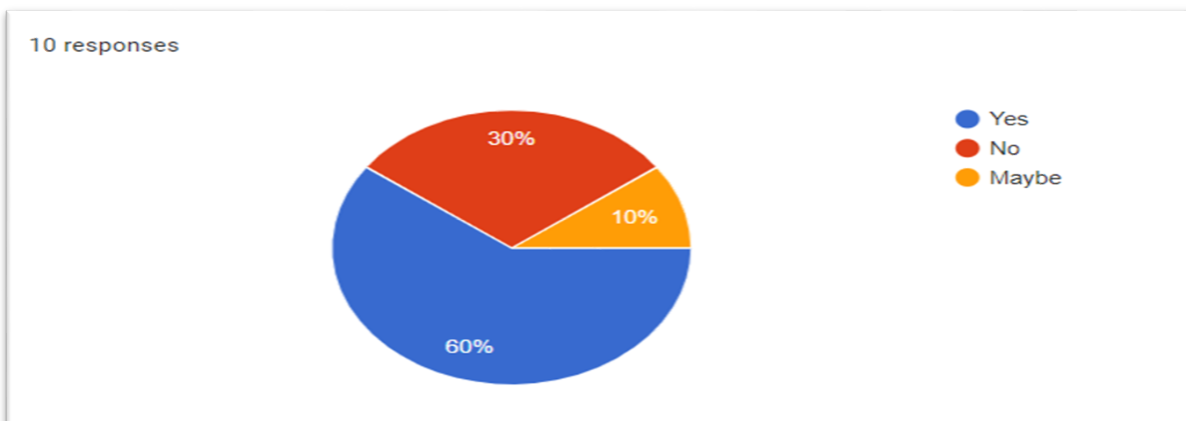
4.

*Figure 4*

Source: (docs.google, 2021)

Analysis: It can be deciphered from the survey that 50% of the students agreed that VCLE is a better learning process than offline mode. On the other hand, 50% of the individuals stated it is not an effective method.

5.

*Figure 5*

Source: (docs.google, 2021)

Analysis: From the survey, it can be analysed that 60% of the respondents stated that the university provides proper resources in the VLE process. Whereas, 30% of them disagreed with this question and only 10% of the respondents were not sure about the resources.

4.2 Secondary Data Analysis

Uses of critical thinking skills to enhance innovation among the students

One of the most effective skills that every student must possess is critical thinking skills. This allows the students to understand the problems in an effective manner. The decision-making process is highly supported with the help of this method. Along with that, it allows the students to gain real-time and appropriate knowledge regarding information which will support the overall process of learning. Further, the critical thinking skills also allow the students to enhance their creativity level which will support their careers.

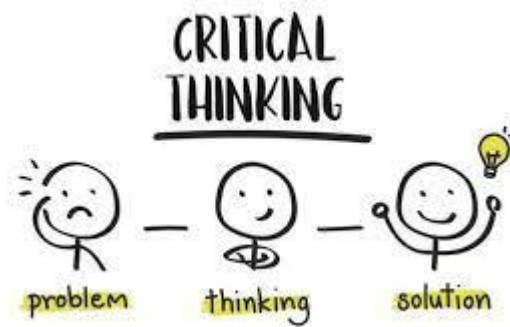


Figure 6

Source: (Piedra, 2021)

Techniques of the Virtual Learning Approach

The virtual Learning Approach is a web-based platform and has various techniques induced within it. Some of them are discussed below:

Interaction:

This is one of the most vital techniques of the virtual learning approach. This allows students to conduct effective communication with the teachers and with their classmates. With the help of this, the students get to solve their queries regarding the challenges faced in the learning process. Apart from that, this helps the students in gaining proper engagement with their studies. With

proper interaction, the students get to share their point of view with others which will allow them to enhance their own skillset.



Figure 7

Source: (Piedra, 2021)

Feedback:

It is mandatory that every student should be monitored from time to time and provided with proper feedback in order to support the overall learning process. The feedbacks allow the students to gain proper knowledge regarding themselves. The students get to know about their strengths and weaknesses, through which their focus towards the studies gets increased. The feedbacks also help the teachers to communicate well with the students which support the engagement level of the students.



Figure 8

Source: (HOLL, 2020)

Audio-visuals:

The current world situation has witnessed a significant rise in the use of advanced technological aspects. In the same way, it has also supported the learning environment with the process of audio-visuals. It has been proven that students tend to learn more when topics are taught in the form of visuals and audio. This allows students to gain a proper understanding of a topic. This process attracts the attention of the students and allows them to stay focused.



Figure 9

Source: (HOLL, 2020)

5. Conclusion and Recommendations

5.1 Conclusion

The prime focus of this research has been on Virtual Learning Environment. The current pandemic situations have witnessed a proper rise in the use of the VLE platforms in order to support the learning procedures. The ways in which the VLE learning process enhances the knowledge of students has been explained through this research. This process allows the teachers to formulate proper plans with the help of which the learning of the students can be improved. Various techniques of VLE have been explained in this research. This research has discussed the ways through which VLE improves the skillsets of the students.

5.2 Recommendations

Some of the ways in which educational institutes can improve their ways of teaching by implementing Virtual Learning Environment are stated below:

Incorporating effective role play: It is recommended that the students must focus on taking an effective part in role-playing. This will help them to stay engaged with the learning process. Through this, the students get effective knowledge regarding the topic.

Enhancing the use of audiovisuals: Using audio visuals helps the students in getting the proper information regarding a topic. It is recommended that the institutions focus more on the use of PowerPoint presentations and video-based learning in order to enhance this process. This will provide proper effective knowledge through which the learning habits of the students can be influenced.

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Appendix -1

Figure 1:

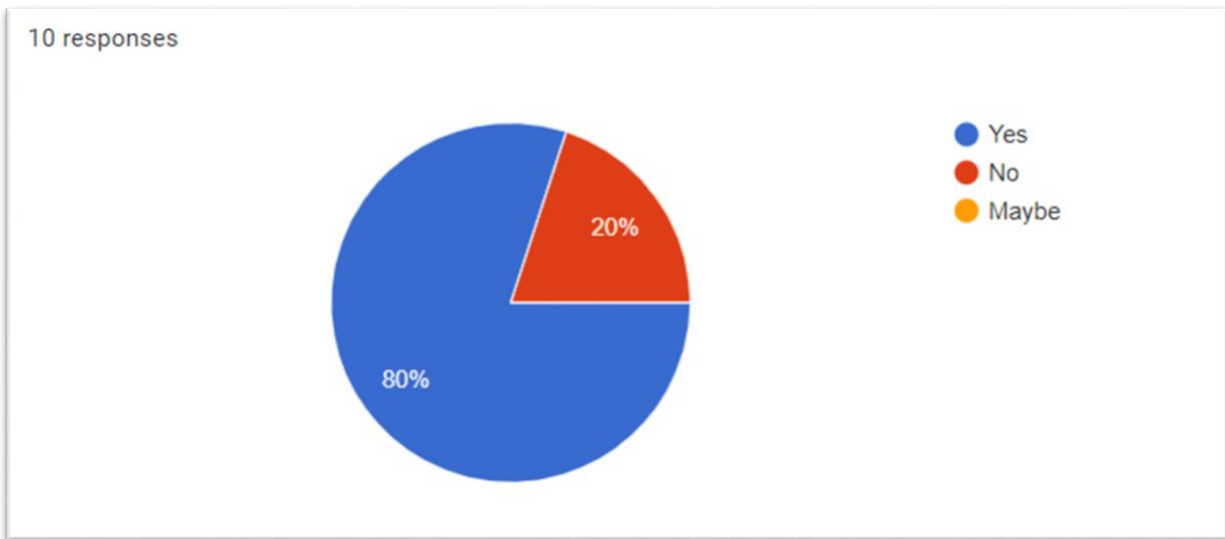


Figure 2:

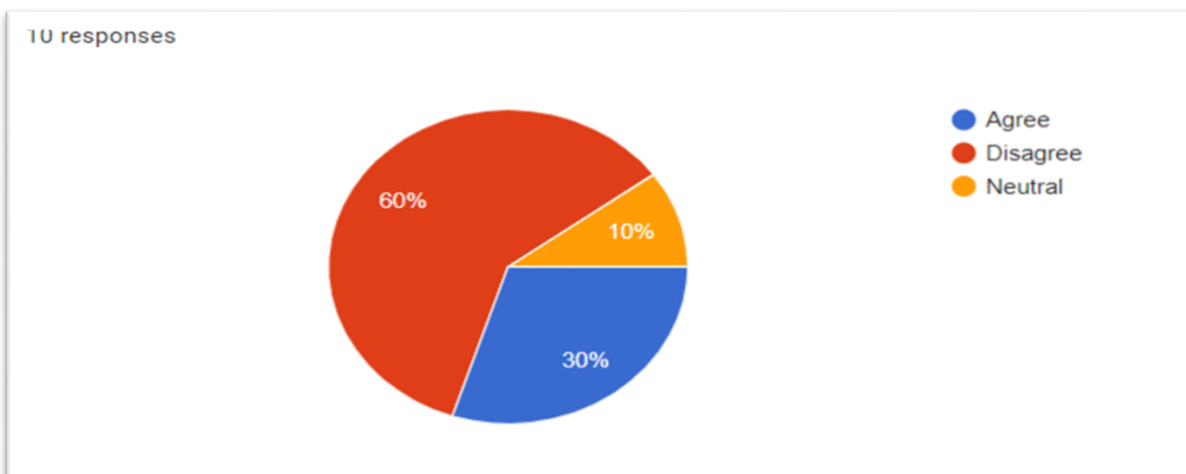


Figure 3:

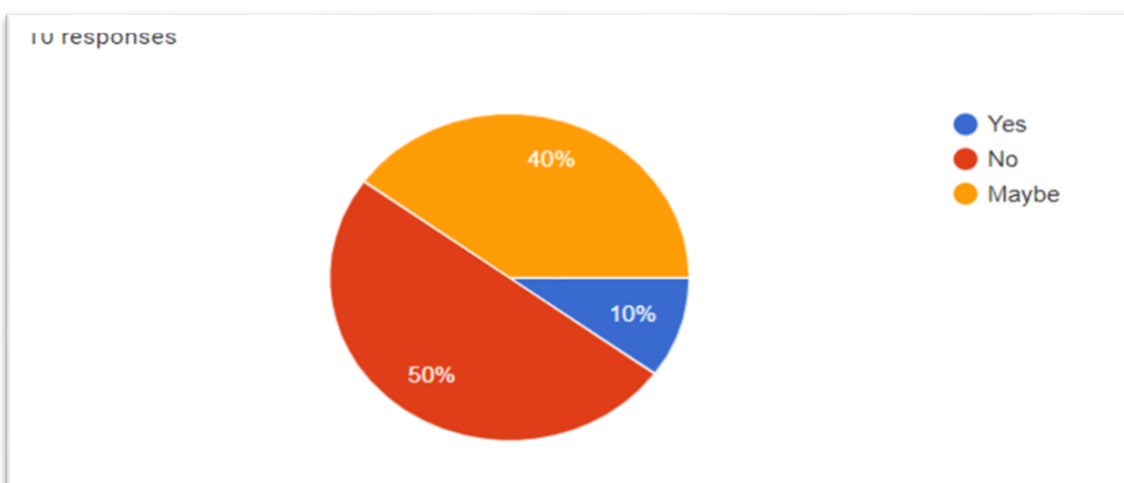


Figure 4:

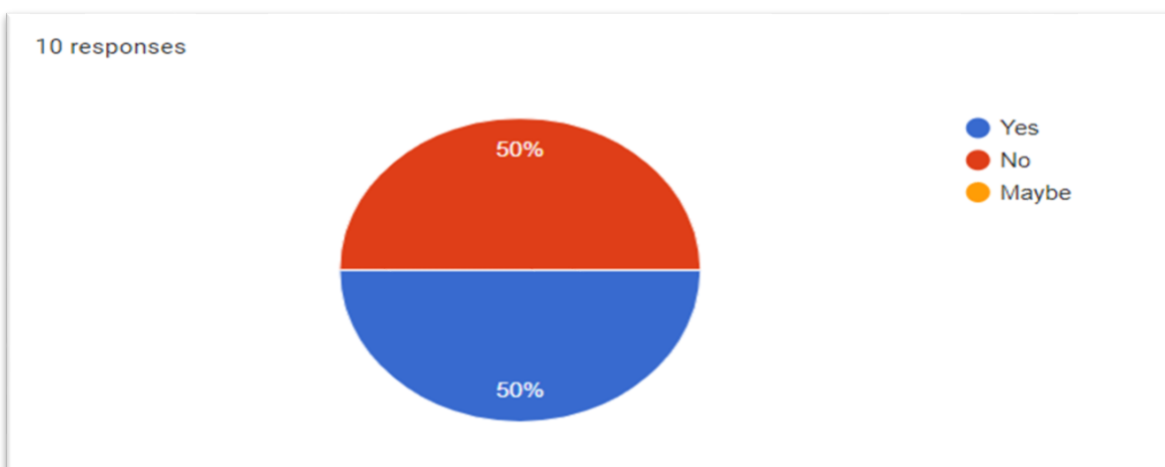


Figure 5:

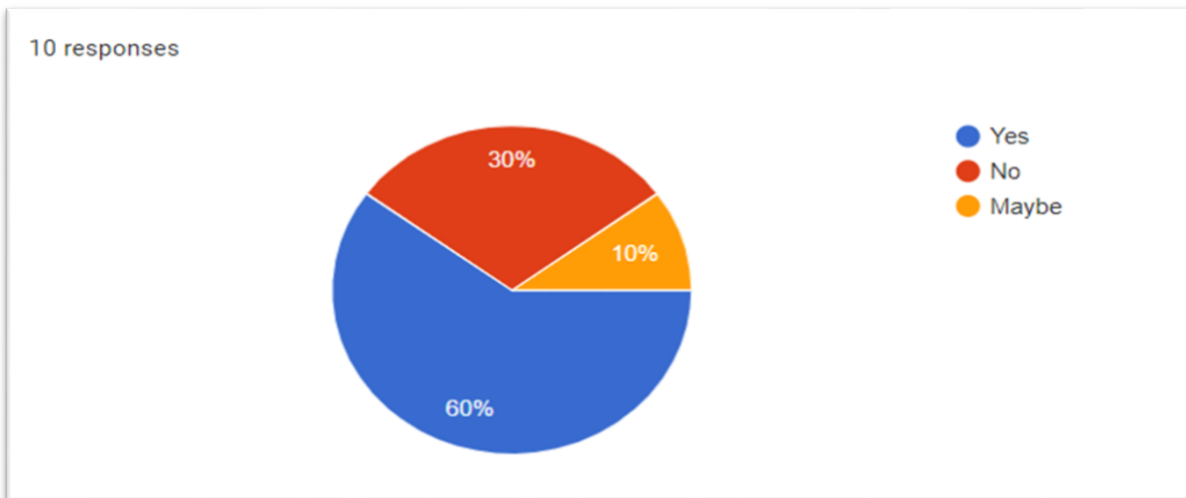


Figure 6:

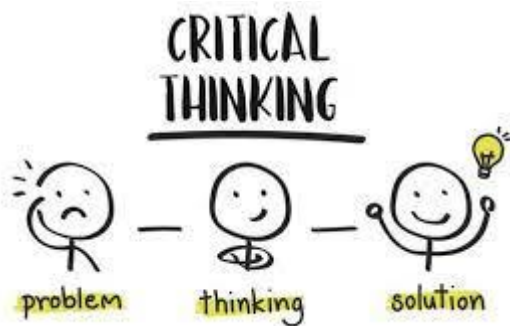


Figure 7:



Figure 8:



Figure 9:



Appendix -2

Questionnaire:

1. Does virtual learning promotes the system of education in current pandemic situation?

a. Yes

b. No

c. May be

2. Is virtual learning an effective method of developing skills within the students?

a. Agree

b. Disagree

C. Neutral

3. Does virtual learning reduces the stress level of the students?

a. Yes

b. No

c. May be

4. Does the process of virtual learning prove to be better than offline learning?

a. Yes

b. No

c. May be

5. Does University of Wales Trinity Saint David London Campus provide proper resources to the students while implementing virtual learning process?

- a. Yes
- b. No
- c. May be