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University of Wales
Trinity Saint David

High certificate skills in the workplace

Module: Digital skills and research methods

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1. Introduction

According to the Joint Information System Committee, a virtual learning environment (VLE) is an online system that is electronic and provides room for the interactions between learners and tutors. Barker and Gossman (2013) define VLE as a software application that has been designed to facilitate pedagogical communication among participants in the education process. This can either be fully distance learning, classroom or both. The concept of VLE can be dated way back into 1973 when learners started to undertake online courses at Stanford University. The concept has developed and advanced since then making it one of the most embraced in recent times. Keppell, Souter and Riddle (2011) record that a VLE is essential because it allows the distribution of educational materials in digital format enable participants to have online discussions as well as integrate content from the network. In this regard, it is critical for learners, learning institutions and any other party concerned to have a clear understanding of the impacts that VLEs have on the learning process. This report is about the effects of VLE on the learning experience of students at the University of Wales Trinity Saint David.

2. Background of the study

The concept of VLEs

Rienties et al. (2016) indicate that a VLE is a computer-based system that aids learning as a process. A VLE is characterised by an environment that makes use of computers, the internet, the interaction between participants and access to useful information. On the other hand, Hlosta et al. (2018) state that a VLE is a collection of software tools that support learning, academic administration also research using the internet. As information and communication are increasingly being conducted online, VLE systems have become a vital part of educational infrastructure in majority of the high learning establishments in across the world. Like E-mails, Keppell, Souter and Riddle (2011) argue that VLEs are centrally provided activities that are delivered right across an institution to improve existing academic practices and not replacing them.

Benefits of VLEs

VLEs improve the existing learning process making it easier for learners to achieve their objectives appropriately. Alves, Miranda and Morais (2017) argue that with VLEs, learning becomes more flexible, especially in terms of time. Trafford and Shirota (2011) concur with

this by stating that having access to all the learning materials 24 hours in 7 days a week allows learners to manage their time properly thus become more productive. Another benefit of VLEs, as indicated by Rienties et al. (2016), is accessibility. A VLEs allow learning to take place online, implying that there is no need for students to attend regular classes. This makes it easier for disabled people and those living in remote areas to access education at their own convenient time without entering a classroom. Avelino et al. (2017) argue that VLEs make learning affordable to students. Here, learning via VLEs does not require learners to pay tuition fee; thus, one can acquire a degree from a top university without incurring a lot of costs. Mueller and Strohmeier (2011) argue that VLEs are timesaving for teachers; they can use and reuse learning materials as they are online rather than reprinting them.

Challenges of VLEs

One of the challenges is the adaptability struggle. According to Trafford and Shirota (2011), changing from classroom-based learning to computer-based learning can be a big challenge to learners. Such a change makes learning totally different, thus hard for some learners to adapt. Another challenge technical issues. Earning on VLEs requires one to have strong internet connection or high bandwidth which some learners have no access to. Weak connections make it hard for them to follow the course management system; this, in turn, makes their learning process problematic. Computer literacy, as indicated by Al-Azawei and Al-Masoudy (2020), is another challenge associated with VLEs. Despite the fact that the majority of students are generally tech-savvy, computer literacy is a major challenge among learners. Hampel (2014) concurs with this by arguing that the majority of learners are not conversant with computer programs and software thus difficult for them to manage their work appropriately. Self-motivation is a key challenge of learning through VLEs. According to Korolov (2014), self-motivation is one of the essential requirements of e-learning. Learners need to be self-motivated to achieve the set objectives, but it is not the case for the majority of learners. Cleveland-Innes and Campbell (2012) agree by indicating that the majority of learners undertaking their courses online tend to fall back and start developing a quitting mind.

Risks associated with VLEs

According to Pedersen et al. (2016), learning via virtual environments exposes participants to different risks. Hampel (2014) argues that VLEs can expose learners to third party individuals

like hackers whose interest is not best for students. This can lead to loss of confidentiality and availability among learners. Learning via VLEs can create room for procrastination, thus failure of a learner. Another risk is cheating. Learning via VLEs implies that learners and tutors only meet virtually and not face to face. In this case, learners can be tempted to engage in unethical behaviours like exam cheating leading to the acquisition of fake degrees.

3. Research Aims and objectives

Aims

According to Wilson (2014), the research aims to outline the purpose of a study; they indicate what a researcher aims to achieve upon completion of a project. In this regard, the primary aim of the study is to investigate the impacts that VLEs have on the learning experience of students.

Research objectives

1. To determine the impacts of that VLEs have on the experience of learners
2. To gain knowledge regarding VLEs
3. To determine how VLE services can be improved
4. To establish the challenges associated with VLEs and ways in which the services of VLEs can be improved.

Research Rationale

The study provides information on the impacts of VLEs on learners which learning institutions can use to devise good strategies to improve on their experience. Moreover, the study provides data on the challenges associated with VLEs and ways in which services from VLEs can be improved. Such information will help learning institutions improve their teaching as well as the performance of learners adequately.

4. Research method

The study made use of both qualitative and quantitative research methods. According to Wilson (2014), quantitative research method entails analysing data using statistical tools like SPSS, MS Excel among others while the qualitative method entails analysing a phenomenon in detail without with the use of statistical tools. The qualitative research method was considered for in-depth analysis of variables under consideration while the quantitative

method was selected to determine the relationship between the VLEs and student learning experience.

Research approach

The study made use of both primary and secondary research approaches. In the case of the secondary approach, the study made use of various resources to collect data relevant to the topic under consideration. The secondary resources employed throughout the study include books, journals, articles and other publications. These sources were thoroughly reviewed, and the information collected was employed to complete the literature review section. After completing this, the primary research approach was employed to collect quantitative information regarding the impacts of VLEs on student's learning experience at the UWTSD university. Electronic questionnaires comprised of 10 questions were well-designed and distributed to 10 people via email. The main reason for using the email channel is due to the measures that have been put in place to protect lives against covid-19 pandemic that is affecting the country and other parts of the world.

5. Result

Table 1: Responses for questions 1, 2, 7 and 8

Questions	Responses (Yes)	Responses (No)	Responses (Not sure)
1	13	0	1
2	11	0	3
7	8	0	6
8	7	0	6

Table 1, The students have knowledge on how to use VLEs and they prefer using it for their studies.

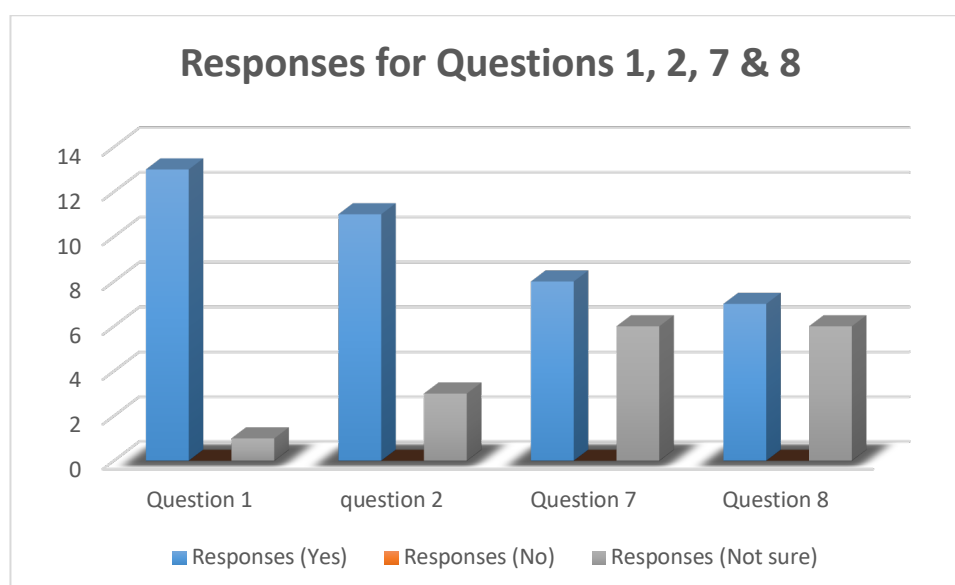


Table 2: Responses to questions 3

Questions	Strongly disagree	Disagree	Maybe	Agree
Question 3	2	1	5	6

Table 2, showcases information regarding whether participants would like the University to continue using VLEs. The results show that majority of the students are happy with VLE.

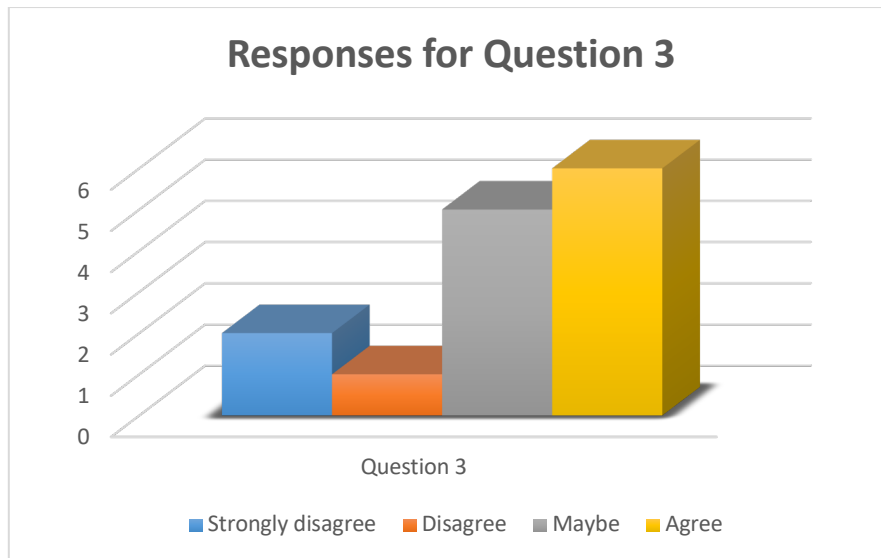


Table 3. Responses for question 4

Questions	Strongly disagree	Disagree	Not sure	Agree	Strongly agree
Question 4	1	5	1	5	2

Table 3, indicates information regarding whether respondents prefer communicating with their friends and lecturers via VLEs. The information shows the majority of the students prefer communicating via VLEs.

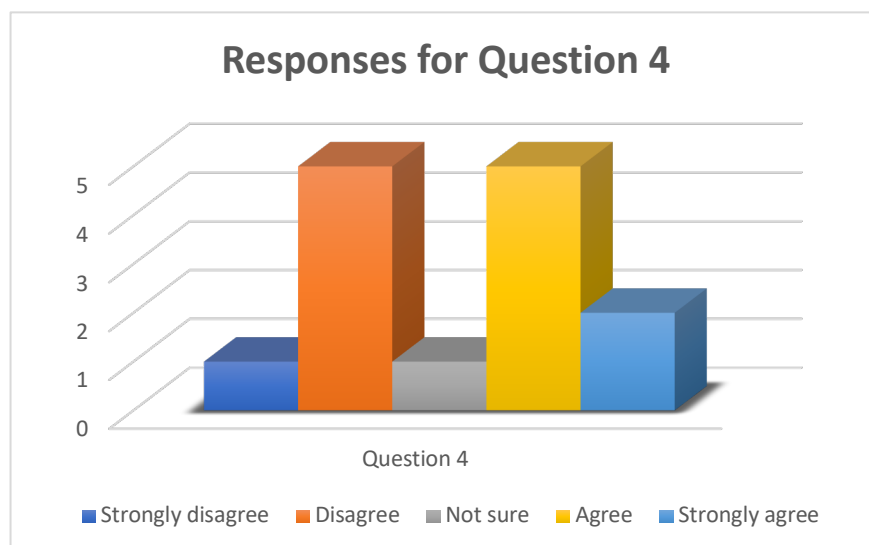


Table 4: Responses for question 5 and 6

Questions	1	2	3	4	5	Classroom	VLE
Question 5	0	1	1	5	7	0	0
Question 6	2	2	4	1	1	2	1

Table 4, learning via VLEs has a significant impact on the academic studies of learners at the University. The learners prefer learning via classrooms than on VLEs.

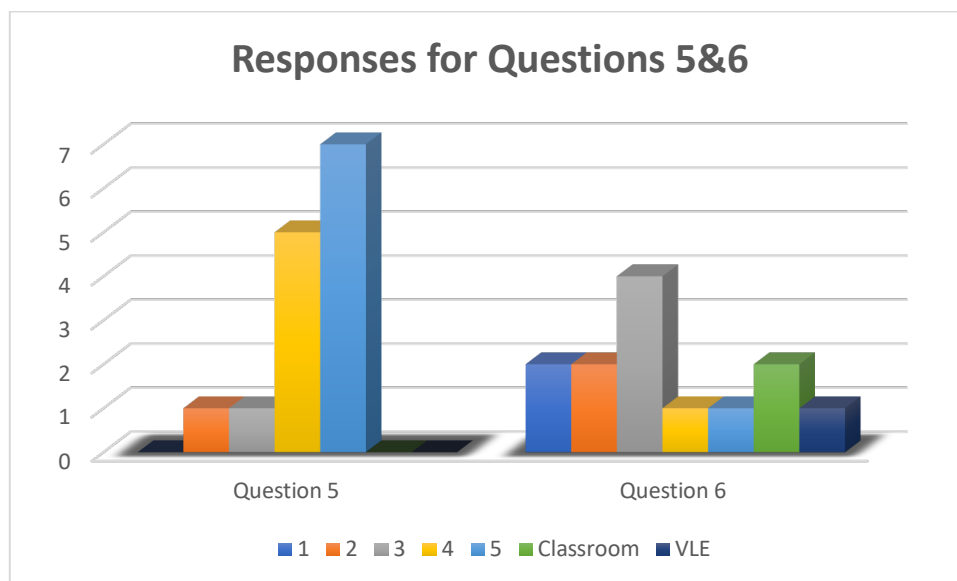


Table 5: responses for question 9

Questions	Good	Wisely	It's very good to saving time	Nice and fun
Question 9	5	2	2	1

Table 5, The students are feeling good using VLE to learn.

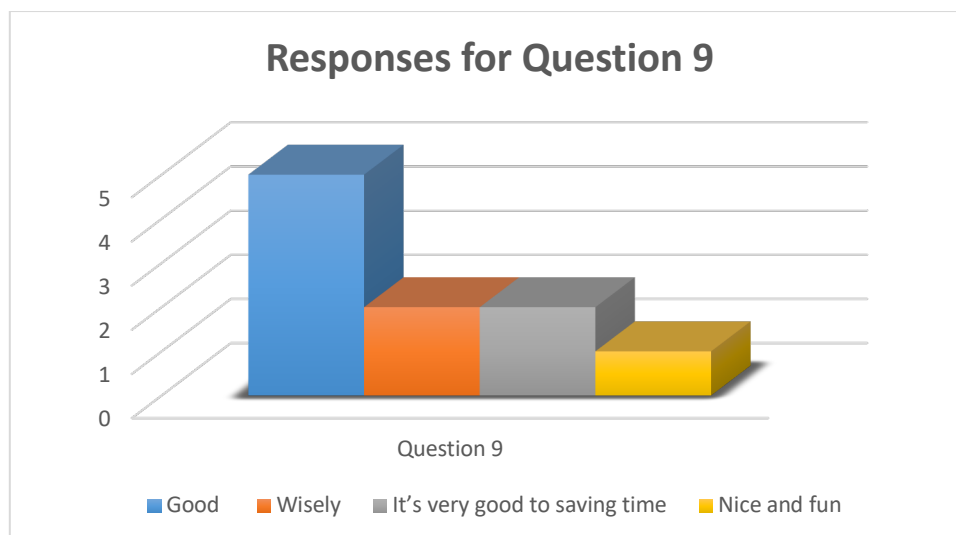
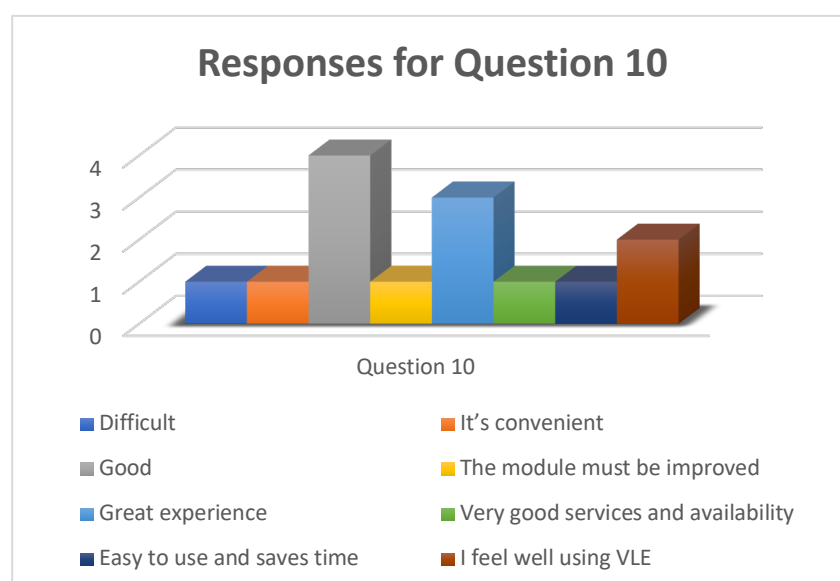


Table 6: responses for question 10

Questions	Difficult	It's convenient	Good	The module must be improved	Great experience	Very good services and availability	Easy to use and saves time	I feel well using VLE
Question 10	1	1	4	1	3	1	1	2

The analysis, it can be noted that students have a good experience using VLE in learning.



5. Discussions

Based on the primary analysis part, it can be noted that VLEs provide learners with the necessary materials they can use to complete assignments as well as continue with learning during this period of Covid-19. According to Alves, Miranda and Morais (2017), a VLE is a system that allows learners to access different types of materials regarding a module and they can access them at any time and from anywhere. This enables them to improve their performance significantly. On the other hand, the results show that learners at the University are okay with the University continuing with the use of VLEs. This implies that VLEs play a vital role in the learning process of students. The results further indicate that students feel extremely good when using VLEs. This implies that learners are leaning more to VLEs than the classroom. In the case of secondary research, it can be noted that VLEs impact learners and teachers positively. Here, learning via VLEs enable learners and teachers to save on time as well as minimise costs associated with learning. Also, it is easily accessible, implying that learners can access it at any time and from anywhere.

The findings from the secondary research indicate there learning via VLE involves various challenges which learning institutions should address to enhance learner experience on such platforms. Some of these challenges include adaptability struggle, technical issues such as internet connections, time management and self-motivation. In relation to the challenges, it is recommended that learning institutions should put in place viable measures to address them. With adaptability struggle, it is recommended that learning institutions should discuss the benefits of learning with learners and teachers. Doing this will better prepare learners as well as change their mindset regarding online learning. In the case of technical issues, it is recommended that learning institutions should provide a high bandwidth connection or encourage learners to have a strong internet connection to avoid frustrations.

7. Conclusion

The main aim of the study was to examine the impacts that virtual learning environments have on the experience of learners. Based on the analysis from both primary research and secondary research, it can be concluded that VLEs are beneficial to the learner. They save them time and costs, which could otherwise deter others from learning. It makes the learning

experience good as learners can access materials at any time. It can be concluded that VLEs are associated with various challenges that learning institutions should address to ensure efficiency and effectiveness of VLEs. They include adaptability struggle, technical issues like internet connection, self-motivation and time management. It was recommended that learning institutions should address the issues to enhance the learning experience of students adequately.

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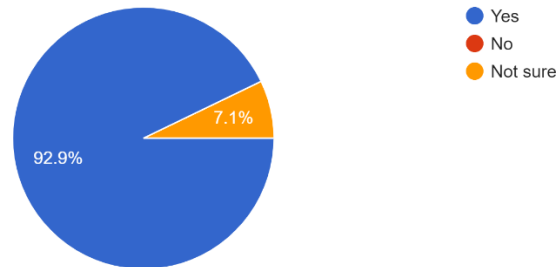
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Appendix

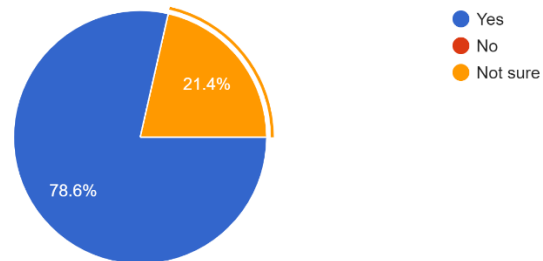
Q1. Do you have proper knowledge of how to use VLE for our studies?

14 responses



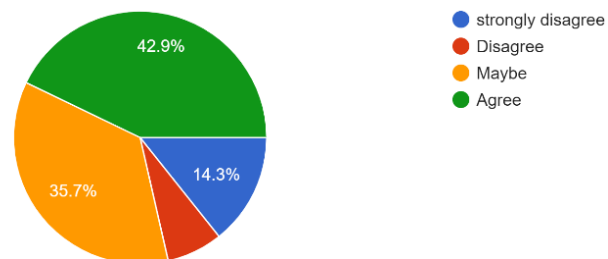
Q2. Do you prefer to use VLE for your studies or not?

14 responses



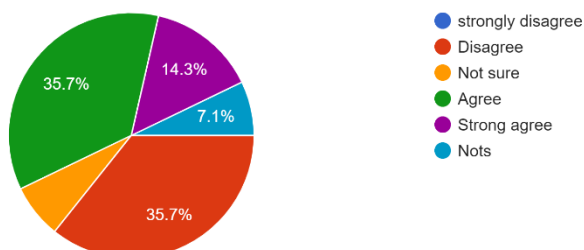
Q3. Would you like to see that the university continues to use the VLE platform after the pandemic as well?

14 responses



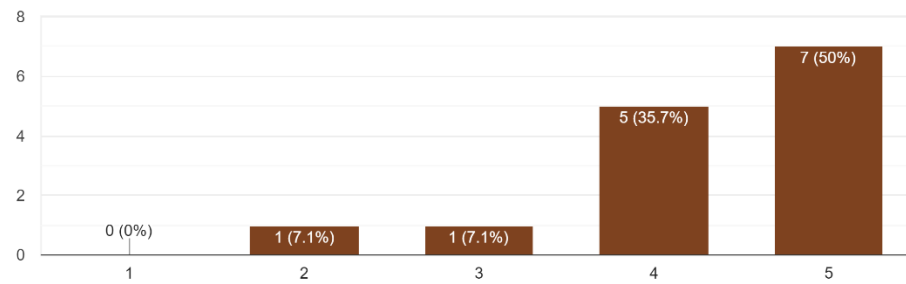
Q4. Do you prefer to communicate with your lecturers and your friends via VLE?

14 responses



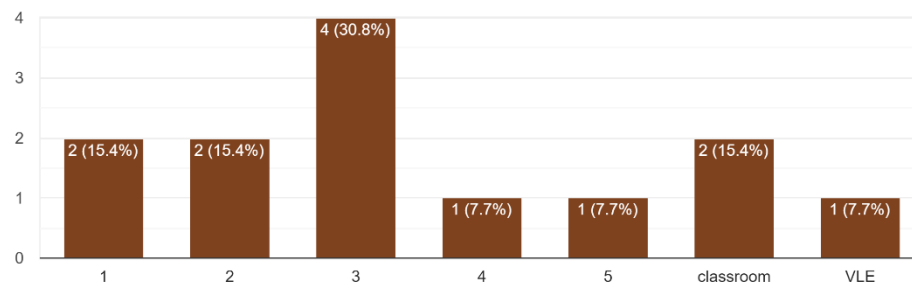
Q5. Please rate the impact of the online learning platform on your academic studies?

14 responses



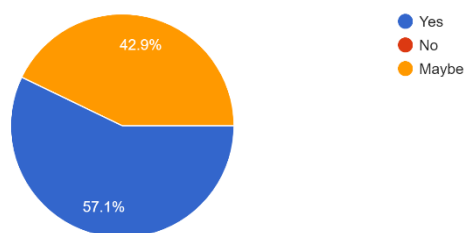
Q6. Please rate your preference to do your studies in a classroom environment or VLE?

13 responses



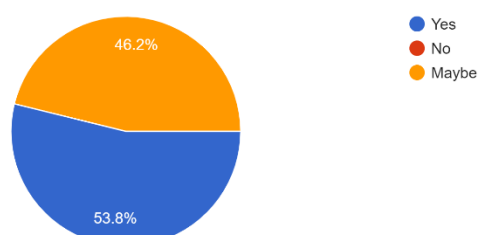
Q7. Does a university e-learning platform meets your needs to complete your assignments?

14 responses



Q8. Do you find required and appropriate resources in VLE for each module which you study?

13 responses



Q9. Please explain how you feel about the VLE used by the university?10 responses

good

Wisely

It's very good to saving time

Nice and fun experience

Q10. Overall, please tell your experience in relation to the use of VLE?14 responses

Difficult

its convenient

good

Moodle must be improved

I feel well using VLE

i find it very easy to use and extremely efficient time wise.

very good services and availability

It's been great experience

6 responses

good

Difficult

I feel good with VLE

Not bad