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Digital Skills and Research methods
DSR assessment 2 individual report
VIRTUAL LEARNING ENVIRONMENT (VLE)

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Introduction

A virtual learning environment is one of the most essential additions to the educational system. It has the possibility of creating different types of learning environments through the utilisation of digital resources. It also has the ability to attract students who have stronger digital competencies. In the modern world, there is a requirement for digital skills among every individual student and this is why a virtual learning environment is very much compatible with almost everyone's requirements. However, like any other new technology, there are also some positivities and negativities within it. There is a requirement of having appropriate utilisation of it to a certain limit. The application of it should also be done within some specific environment. This report discusses the importance of a virtual learning environment and its effectiveness.

Primary data analysis

Five questions are formed for collecting data from individual students regarding their preferences toward the virtual learning environment. The questions are related to the effectiveness of VLE and the uses of it

Question 1: What are the benefits of using VLE?

Transparent communication	4
Time-saving ability	3
Formation of digital skills	2
Completion of more learning activities	1

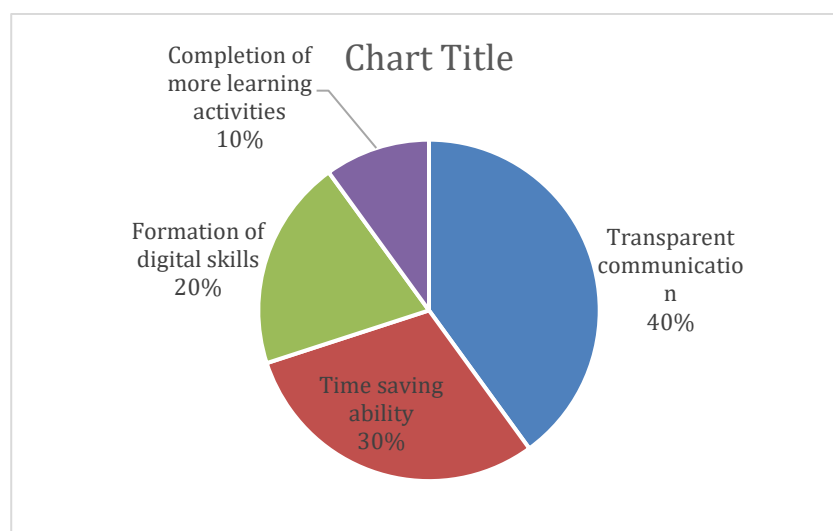


Figure 1: Impacts of using VLE on individual

(Source: Self-created through Excel)

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The preferences of individuals towards the use of virtual learning environments are different and it is completely because of different skills and competencies among individuals. Four out of 10 individuals have selected the option of transparent communication. It means in a virtual environment there are more possibilities of having better communication among the teachers and students. Any communication can only be transparent if there are equal opportunities for all the students to gain knowledge and everyone also get a similar standard of information. After that, the time-saving ability of the virtual learning environment is another strength of it as per their responses. The students get more time to complete their individual tasks and learning activities. There are also fewer possibilities of time waste. It is because the educational institutions get more time for providing all the learning resources to the students. The options of completing more learning activities and formation of digital skills have also got three supports. It is to keep in mind that all of these are the benefits of a virtual learning environment and the individuals have chosen the option as per their individual priorities.

Question 2: What kind of VLE do you prefer most?

Mobile application	4
Instructional PowerPoint presentations and videos	4
Distance Learning Degree Programs	2

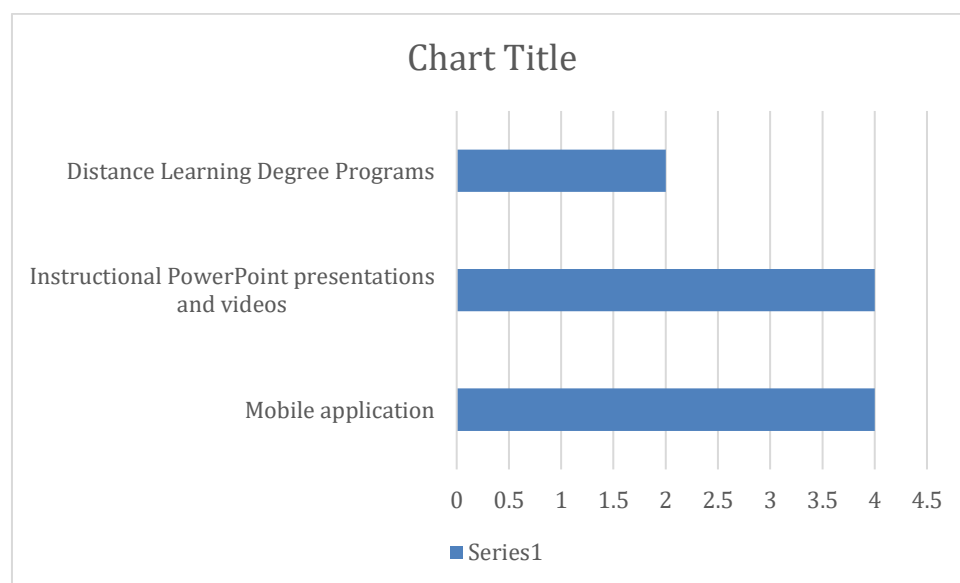


Figure 2: Preference for VLE

(Source: Self-created through Excel)

This question is regarding the use of different types of virtual learning environments by individuals. There are many options for learning virtually such as the help of a mobile application, the use of PowerPoint presentations and videos, distance learning facilities from home etc. The application of these is made for specific types of students from different learning backgrounds. In this case, the option

of mobile application and the use of PowerPoint presentations are chosen by 4 respondents both. It means there is an equal preference for both of these factors. In a modern-day learning environment, the mobile application allows the students to get all the necessary information regarding their learning with the help of a click only (Boulton et al. 2018). It is also strongly preferred by them as they can access that information from their home. The use of PowerPoint presentation and videos are also beneficial for the learner with visual and auditory learning styles. It also allows them to store the information for a longer time and access them whenever they want. On the other hand, the option of distance learning degree programs is chosen by two individuals and this variation is because of preferences according to personal learning background.

Question 3: What are the problems faced during the use of VLE?

Lack of digital knowledge	4
Connectivity issue	4
Continuous possibilities of distraction	2

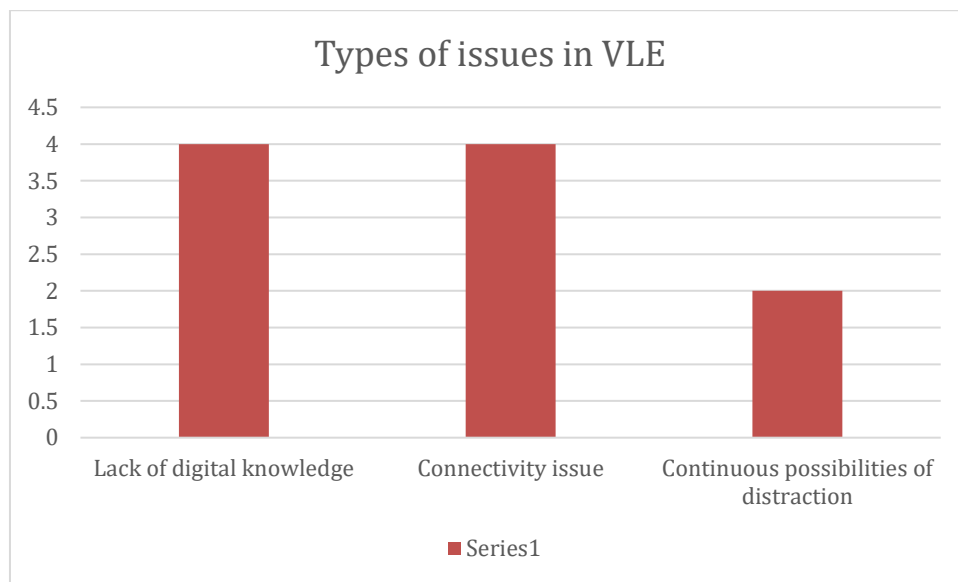


Figure 3: Problems faced by learners while using VLE

(Source: Self-created through Excel)

During the use of a virtual learning environment, there are possibilities of many problems related to the lack of digital knowledge, connectivity issues and distractions. This question is regarding the identification of issues that are faced by individuals. 4 out of 10 respondents have chosen the option of lack of digital knowledge and a similar number of respondents are also for the option of connectivity issue. It shows that the students are not compatible with different software which are used for virtual learning. If they do not have proper digital knowledge then there are possibilities of having negative learning as well (Rashid et al. 2021). On the other hand, the issue of connectivity is also available. If

there is a slow speed network then the students will not be able to access the lectures or any live teaching.

While learning from any remote environment, there are possibilities of many external distractions. Two out of Ten students have also chosen this option.

Question 4: How can an educational organisation overcome the problems related to a virtual learning environment?

Through the initiative of the Government	3
Giving training from an educational institution	4
Increasing awareness about VLE	3

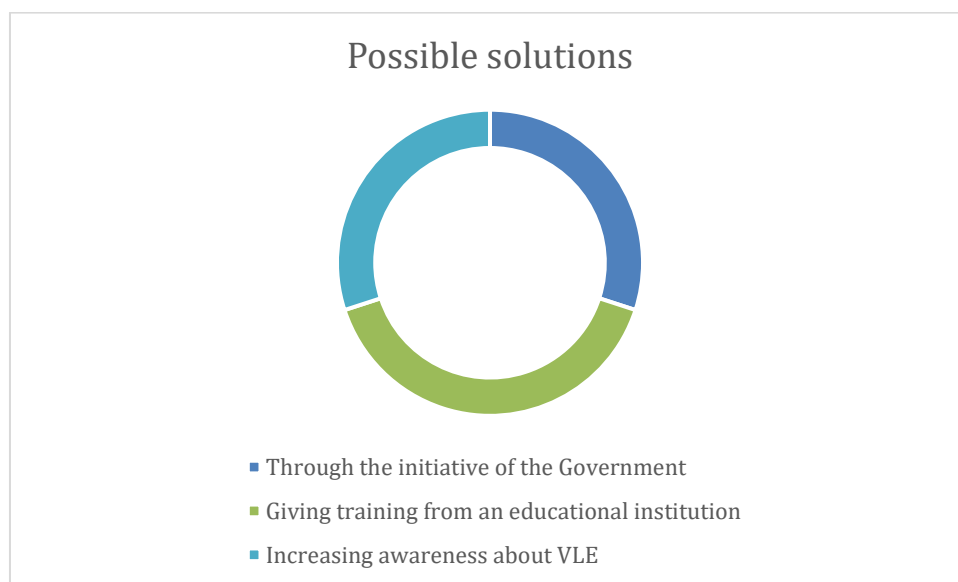


Figure 4: Way of overcoming problems of VLE

(Source: Self-created through Excel)

This question is regarding the possible solutions that can be implemented for avoiding the issues related to the virtual learning environment. The options are related to the initiatives where the government, training and learning programs for the students and increasing awareness about virtual learning environments among people. Almost all the options are preferred equally by the respondents. If there is an initiative from the government then more people will be aware of the importance of a virtual learning environment and they will embrace it (Yang et al. 2018). If educational institutions start to train their students for being comfortable with virtual learning environments then the students will have stronger digital competencies. It will allow them to get faster growth through digital learning. It is to keep in mind that there is a requirement for positive awareness among individual people as well. It will encourage them to be a part of a virtual learning environment only if they know about it. This is why all the options have got almost equal preferences by the students.

Question 5: Do you think that the demand for VLE will be increased in the coming future?

Yes	8
No	1
May be	1

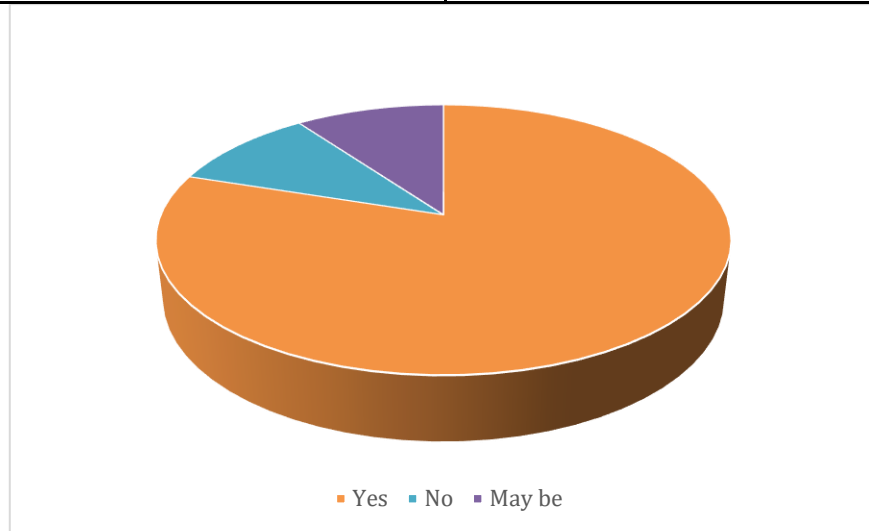


Figure 5: Estimated demand for VLE in the near future

(Source: Self-created through Excel)

This question is regarding the possibility of the increased popularity of virtual learning environments among students and teachers. There are 80% positive responses and it shows that the student thinks it can be popular. There are also strong reasons behind this answer. It is mainly because the positive impacts of a virtual learning environment are very much visible and those are also connected with the individual learning development of the students. The appropriate utilisation of a virtual learning environment is mostly beneficial and there are not any negative impacts of it. The only drawbacks are related to technological issues and connectivity problems. Those issues can easily be solved with the help of the latest technology and a stronger data connection network (Torres Martín et al. 2021).

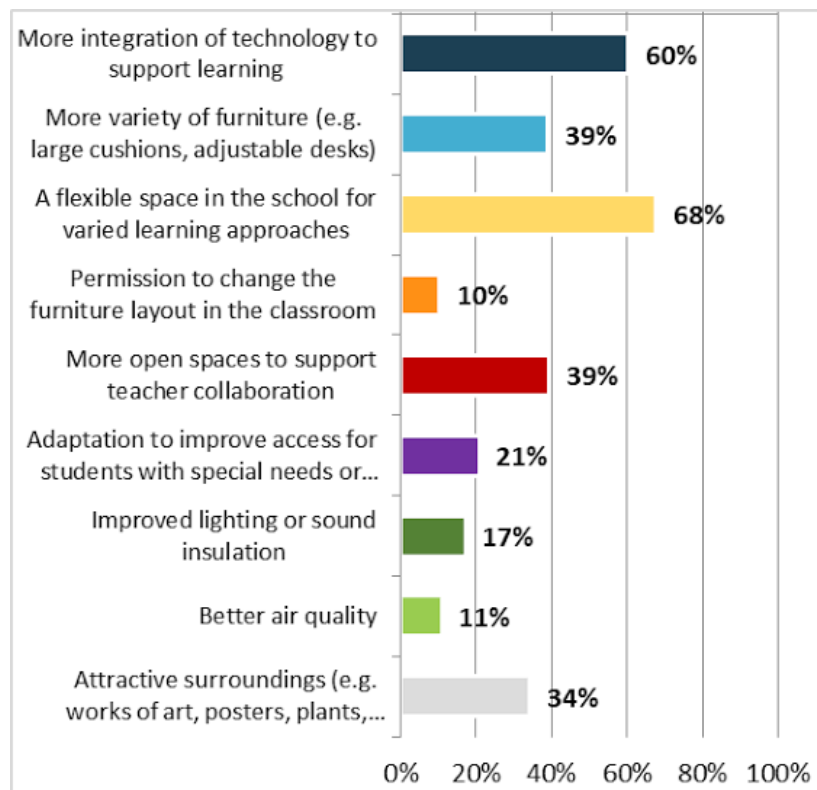


Figure 6: Preferences of students toward a virtual learning environment and other offline factors

(Source: School education gateway, 2022)

It is to keep in mind that the introduction of a virtual learning environment is for replacing the traditional offline teaching method. In the offline teaching method, there are many other features which are not possible to provide in a virtual learning environment. The above graph shows the requirement of individual students for an attractive learning environment. It is good that 60% of the students have preferred that the integration of technology to support learning is necessary for overall growth. However, they have also preferred flexible spaces in the school for varied learning approaches (Ryan and Poole, 2019). It means the student does not like to continue with a particular learning approach for a long time and it is a direct threat to the application of a virtual learning environment. It is because the students will get bored easily and they will not be able to concentrate on their learning for a longer time (Chui et al. 2020). There are also preferences for attractive surroundings in the learning environment and it is not quite possible in virtual learning. More open spaces to support teacher collaboration are also preferred by 39% of the students and it is not also possible in the case of VLE. Undoubtedly, there are a lot of limitations in the virtual learning environment and this cannot be included in it ever. It is because the application of a virtual learning environment is mainly for providing faster progress to the individual learning but if it is taken as the option of one and only learning then it may not be that effective. The other options like improved lighting and a variety of furniture are also only possible in

traditional offline teaching. Therefore, there is enough popularity of virtual learning environment but educational institution needs to think about their long term effects of it. If it is not able to encourage the students to get involved with learning then it may have a negative impact on their learning development as well. From the perspective of teachers, there will be place opportunities to interact with students face to face. Hence, the impact of it will also be on the possibilities of soft skill development within the students. There will be less concentration and consciousness among them because of a lack of guidance. Hence, there is a requirement for a lot of improvement for avoiding this weakness (Kotobee, 2022).

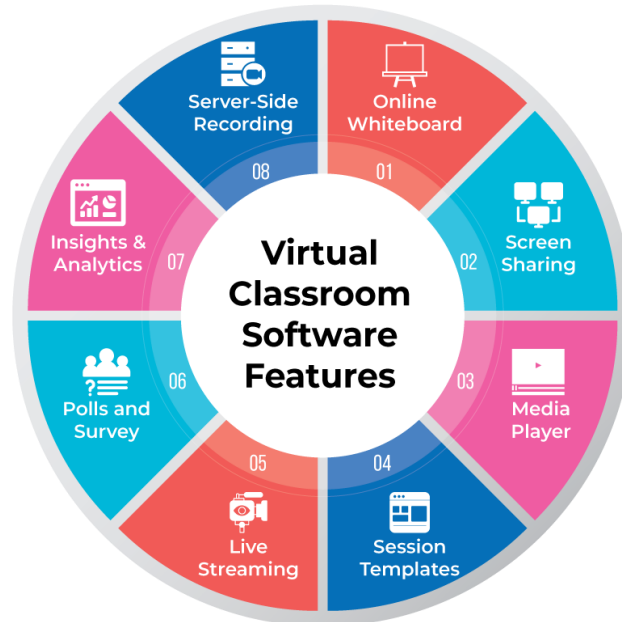


Figure 7: Common features for VLE

(Source: Kotobee, 2022)

The application of a virtual learning environment will open a lot of doors of opportunities for the students and teachers. It starts with the application of an online whiteboard which is accessible from anywhere with the help of mobile applications or other video streaming platforms. It means the students can get a similar type of learning environment which is available in offline schools. Modern-day technology has also introduced the option of screen sharing and live streaming. It means that a teacher can give online teaching to his students and all the students can also have access to that lecture from their homes. It shows that a virtual learning environment has the ability to create a school-like environment even if all the students are accessing it from defending locations. There is also the availability of a media player, session template, lecture notes and all other necessary learning materials. It shows that the students do not require to store information in their notebooks and they can have access to all those lecture notes anytime they want. The primary focus of using a virtual learning environment in the educational system is for improving the experience of learning and helping the students to make the utilisation of maximum of their skills. There is also the availability of poles, surveys, insights and

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analytics in the virtual learning environment. All of these allow an individual student to stay aware of his learning progress in real-time. It also becomes easier for him to have an idea about his own strengths and weaknesses (Bogusevski et al. 2020). From the perspective of a teacher, it becomes easy for him to have tracked the performance of individual students as they can have access to their performance within a specified period.

Conclusion

The above discussion regarding the importance of a virtual learning environment with the help of both primary and secondary analysis has shown that it is a positive technological implementation in the learning environment. There are huge possibilities of getting faster progress in education from the perspective of both the learning institutions and individual students. The preferences of students towards it are also very high and it is mainly because of the time-saving ability of a virtual learning environment. VLE also allows individuals to have access to all the learning materials from anywhere. It has surely reduced the obstacles which are being faced by the students before. There is no doubt that VLE has the ability to provide a better experience to the teachers and students in future as well.

References

- Kotobee, 2022. What Is Virtual Learning and How to Benefit from It? - Kotobee Blog. [Online] Kotobee Blog. Available at: <<https://blog.kotobee.com/what-is-virtual-learning/>> [Accessed 2 May 2022].
- Torres Martín, C., Acal, C., El Honrani, M., and Mingorance Estrada, Á. C. (2021). Impact on the virtual learning environment due to COVID-19. *Sustainability*, 13(2), 582.
- Bogusevski, D., Muntean, C., and Muntean, G. M. (2020). Teaching and learning physics using 3D virtual learning environment: A case study of combined virtual reality and virtual laboratory in secondary school. *Journal of Computers in Mathematics and Science Teaching*, 39(1), 5-18.
- Chui, K. T., Fung, D. C. L., Lytras, M. D., and Lam, T. M. (2020). Predicting at-risk university students in a virtual learning environment via a machine learning algorithm. *Computers in Human Behavior*, 107, 105584.
- Odrekhivskyy, M., Pasichnyk, V., Rzhetskyi, A., Andrunyk, V., Nazaruk, M., Kunanets, O., and Tabachyshyn, D. (2019). Problems of the Intelligent Virtual Learning Environment Development. In *MoMLLeT* (pp. 359-369).
- Yang, D., Alsadoon, A., Prasad, P. C., Singh, A. K., and Elchouemi, A. (2018). An emotion recognition model based on facial recognition in virtual learning environment. *Procedia Computer Science*, 125, 2-10.
- Boulton, C. A., Kent, C., and Williams, H. T. (2018). Virtual learning environment engagement and learning outcomes at a 'bricks-and-mortar' university. *Computers and Education*, 126, 129-142.
- Rashid, A. H. A., Shukor, N. A., Tasir, Z., and Na, K. S. (2021). Teachers' Perceptions and Readiness toward the Implementation of Virtual Learning Environment. *International journal of evaluation and research in education*, 10(1), 209-214.
- Hamutoglu, N. B., Gemikonakli, O., Duman, I., Kirksekiz, A., and Kiyici, M. (2020). Evaluating students experiences using a virtual learning environment: satisfaction and preferences. *Educational Technology Research and Development*, 68(1), 437-462.
- Ryan, E., and Poole, C. (2019). Impact of virtual learning environment on students' satisfaction, engagement, recall, and retention. *Journal of medical imaging and radiation sciences*, 50(3), 408-415.
- Hizam, S. M., Akter, H., Sentosa, I., and Ahmed, W. (2021, March). Digital competency of educators in the virtual learning environment: a structural equation modeling analysis. In IOP

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