

Baciu Florin-Daniel

Student nr:2125628

DIGITAL SKILLS AND RESEARCH METHODS REPORT

**THE IMPACT OF VIRTUAL LEARNING ENVIRONMENT
(VLE) – LEARNING EXPERIENCE OF STUDENTS AT THE
UNIVERSITY OF WALES TRINITY SAINT DAVID LONDON
CAMPUS**

Executive summary

The purpose of the report is to analyse the virtual learning environment that has encouraged students of the University of Wales in applying various learning strategies and future enhances their interest in being engaged in the overall learning process. The objective of the report was to analyse the need for implementing VLE in the University of Wales trinity saint David London Campus and to evaluate the impact of VLE on students learning experiences. The challenges of the university while implementing the VLE have been determined through the application of both primary and secondary data. Thus the findings of the report have ensured that the pandemic has increased psychological issues among students of higher education. The impact of VLE contributes to gaining the experience to coordinate virtually. Further, the issues with the implementation of the VLE have been analysed to be focus studies in the remote environment.

Table of Contents

Introduction	4
Preliminary study	Error! Bookmark not defined.
Methodology	6
Findings and discussion	7
Primary data analysis	7
Conclusion	13
References	14
Appendix: Survey Questions	16

Introduction

Virtual learning is the educational technology where students learn a digital-based curriculum where the instructors deliver the lectures in online videos and audio. In the post-pandemic period, the active participation of the students in the virtual learning environment has been observed.

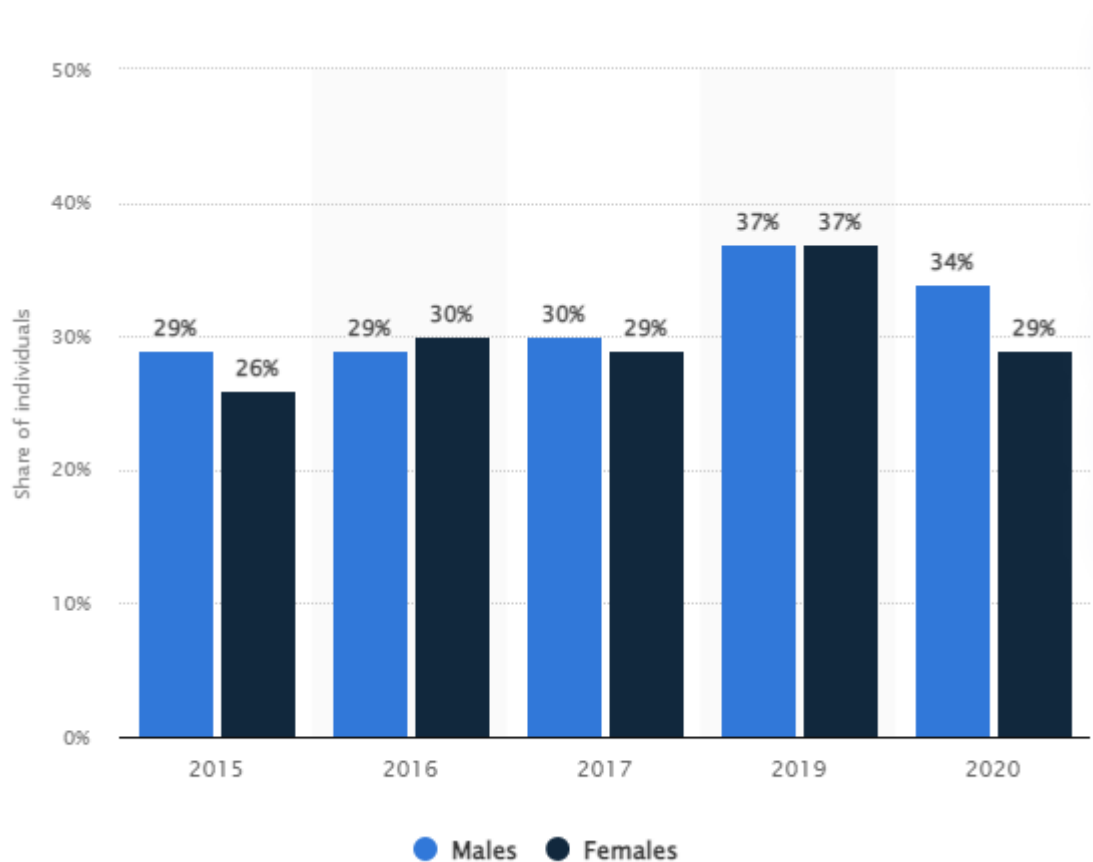


Figure 1: Share of people in online learning activities in the UK by gender

(Source: Statista, 2020)

The above figure has presented the fact that in the UK 34% male were engaged in internet activity whereas 29% of the female are engaged in online marketing (Statista, 2020). In consideration of the University of Wales, it has been found that they have faced issues to coordinate the teaching-learning process due to the announcement of lockdowns and shutdown of the physical campus. It has forced the authority of the university to introduce the Virtual learning platform and has delayed the introduction of face-to-face learning (BBC, 2021). It has brought the opportunity to save time with flexibility and has gained the accessibility of the users to engage them in the learning process. Thus, the report has aimed the identification the impact of a VLE to offer the experience to students at the University of Wales.

The objectives of the report are

- To examine the need for virtual learning environments at the University of Wales.

- To analyse the impact of VLE on the students of the University of Wales.
- To identify the key challenges faced by the University of Wales while coordinating the VLE.

Literature review

In the words of Ferri, Grifoni and Guzzo (2020), the online approach to learning has developed opportunities for students to have control over their studies. It helps the students to organise their activities and helps in making students capable to solve problems on their own. However, Sandars *et al.* (2020) have stated that a lack of face-to-face interaction of the students with their teachers can make students socially isolated and feel demotivated with no interaction with peers.

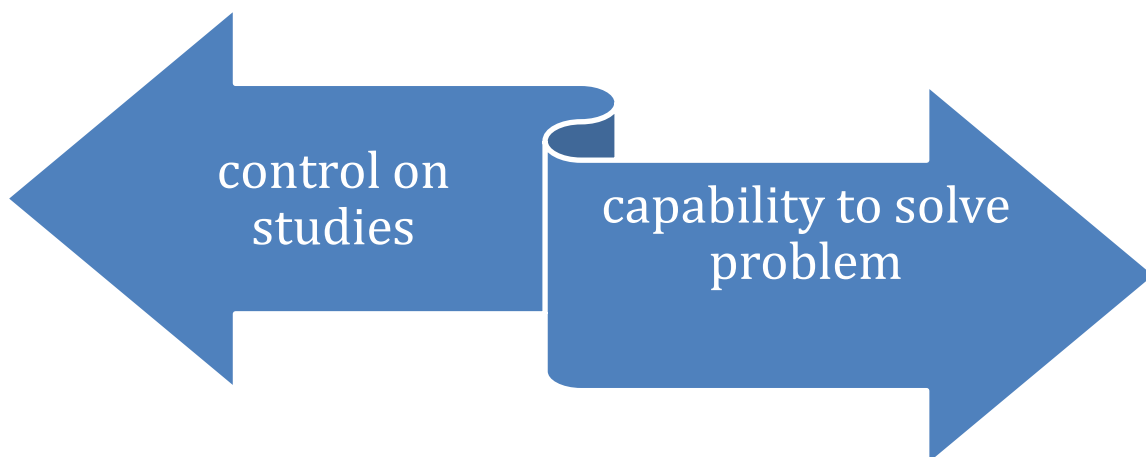


Figure 2: Impact of Virtual learning process

(Source: Self-developed)

On the other side, the accessibility of the internet is the major requirement for establishing a virtual learning environment. According to Dhawan (2020), the challenges in the online learning process are the lack of concentration of students and the fluctuation of the internet causing a waste of time. Hence, virtual learning is somewhat difficult as there may arise multiple distractions and the possibility to lose focus.

The ***theory of constructive learning*** has developed the fact that learners need to interpret and encode the information based on their perception gained from the teaching-learning process.

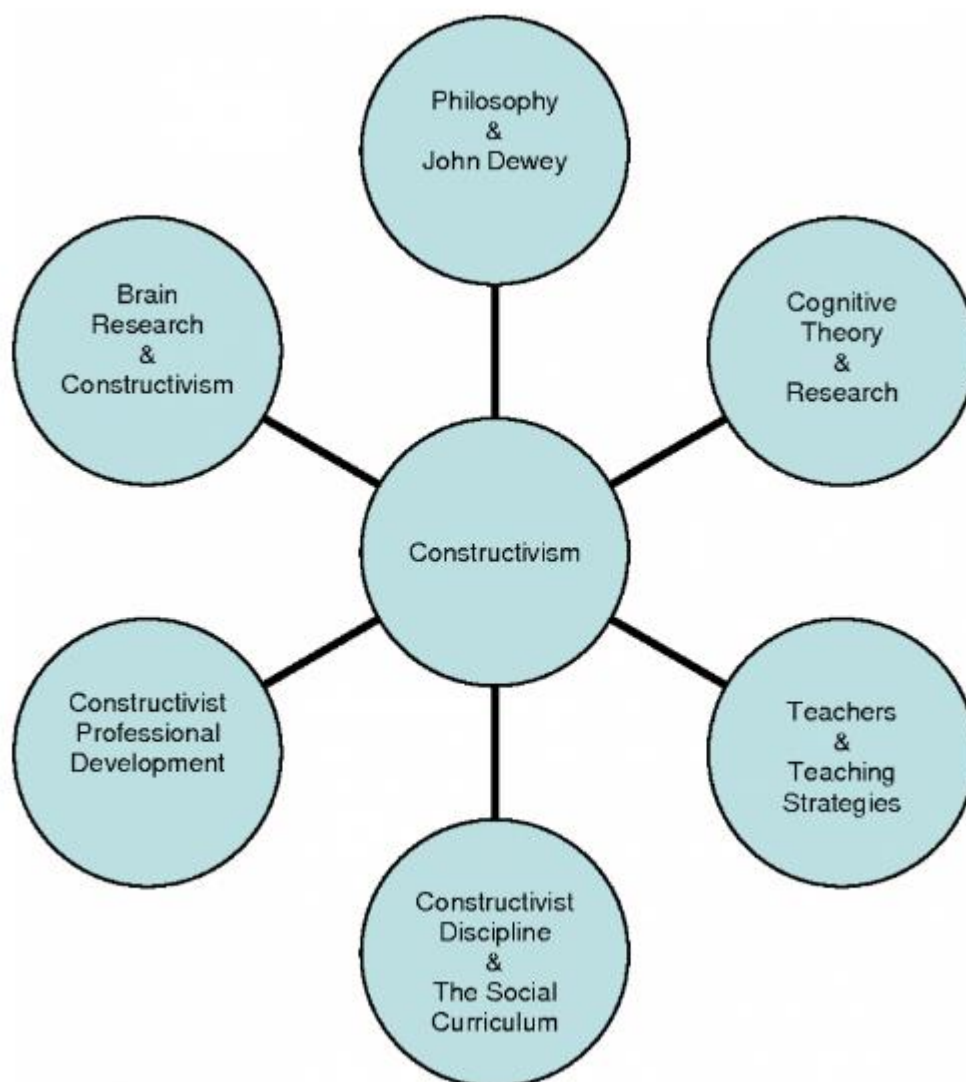


Figure 3: Theory of constructive learning

(Source: Mukhalalati and Taylor, 2019)

The theory has therefore ensured the fact that learners have constructed the knowledge and do not have passively adopted the information (Mukhalalati and Taylor, 2019). Thus, the adoption of the theory has ensured that learners conduct the knowledge for themselves being active participants in the learning journey and gaining the capability to develop new insights from the learning.

Existing literature has developed the concept of virtual learning and its impact on the students to attain learning outcomes. However, a **gap in the literature** has been analysed to identify the experience of the students enrolled in the University of Walls in Trinity Saint David London Campus with the conduction of the virtual learning procedures.

Methodology

The report has been developed with the paradigm where interpretivism philosophy, deductive approach and descriptive design have been used. They are preferred as it helps

to evaluate qualitative data and supports the formulation of quantitative data to analyse the learning experience of students of the University of Wales with a systematic presentation and act effectively in developing relation between virtual learning and student experience. A mixed data collection method has been applied where primary data has been gathered through a survey and secondary data has been gathered evaluating the journals and articles. Primary data has been preferred to gather real-time information to analyse the personal experience of students of the University of Wales (Sollazzo *et al.* 2020). On the other hand, secondary data has brought the scope to gather data from a wide range of secondary sources having relevant information about the impact of VLE and the experience of the students in Universities. Survey has been conducted with the development of five open-ended questions to the 50 students of the University of Wales of the Trinity Saint David London Campus. The survey responses have been presented in an Excel sheet. The application of the random sampling process has filtered 30 responses from the survey and through inclusion and exclusion criteria secondary data has been filtered from 20 to 7-13 sources. Statistical data analysis has been applied to formulate survey responses and thematic data analysis has been applied to develop 3-5 themes to conduct the outcomes based on objectives.

Findings and discussion

Primary data analysis

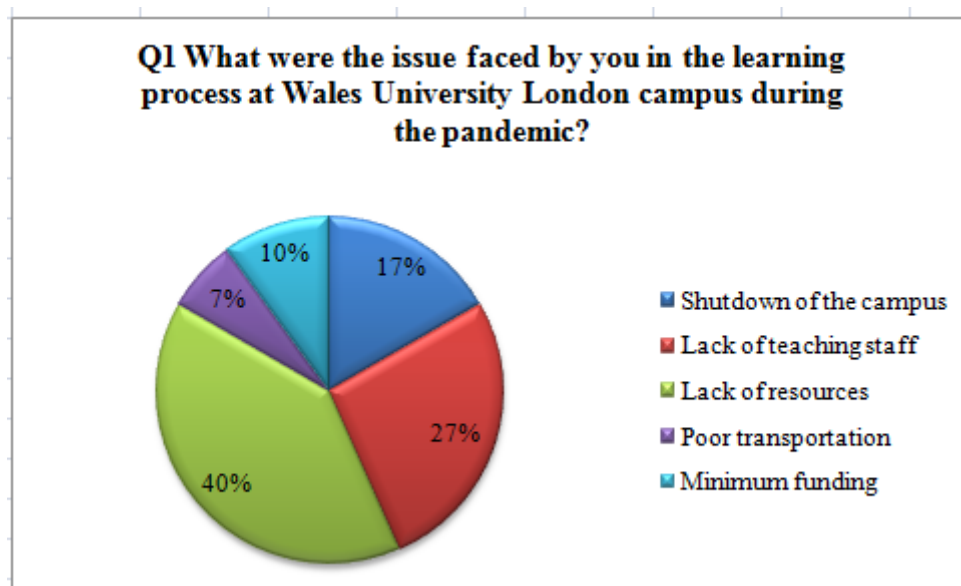


Figure 4: Response to question 1

(Source: Self-developed)

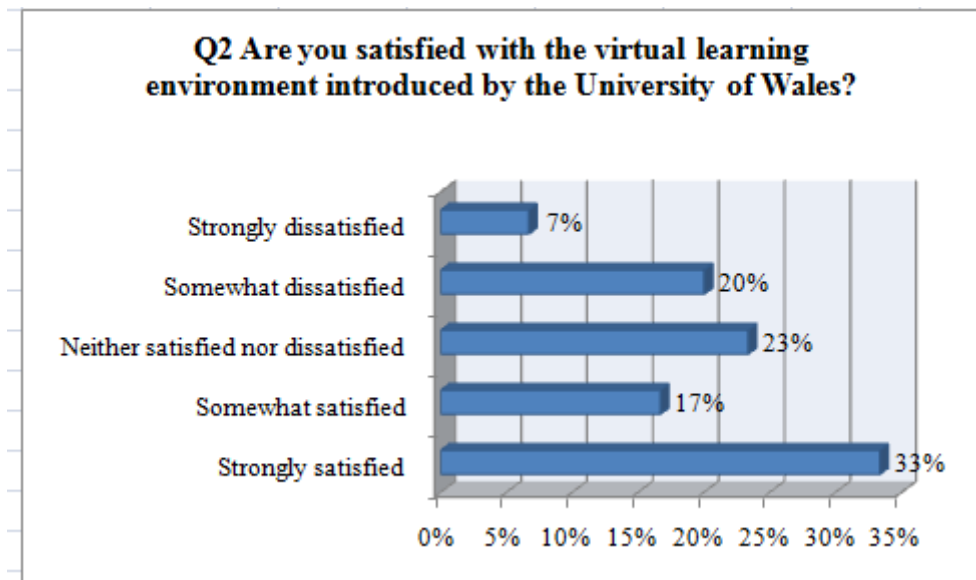


Figure 5: Response to question 2

(Source: Self-developed)

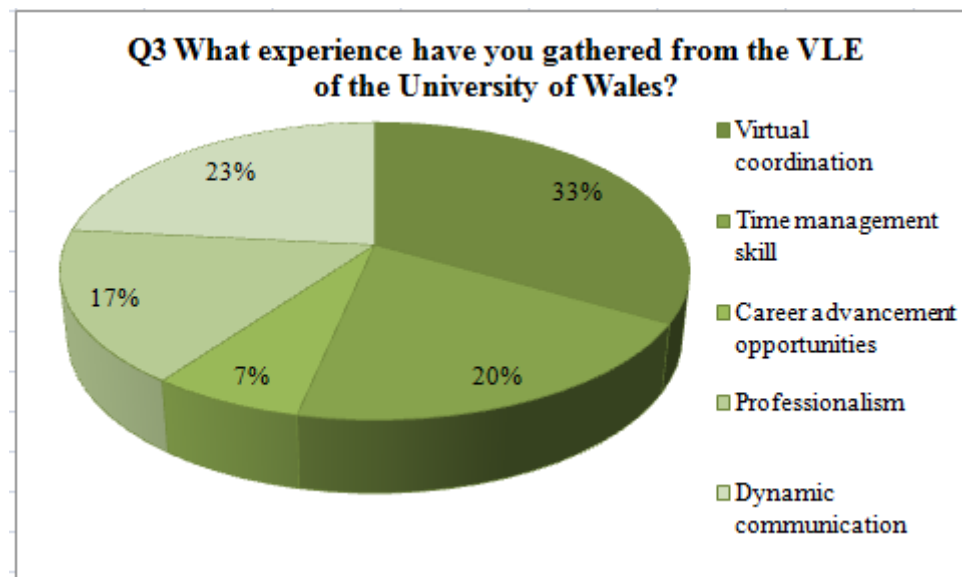


Figure 6: Response to question 3

(Source: Self-developed)

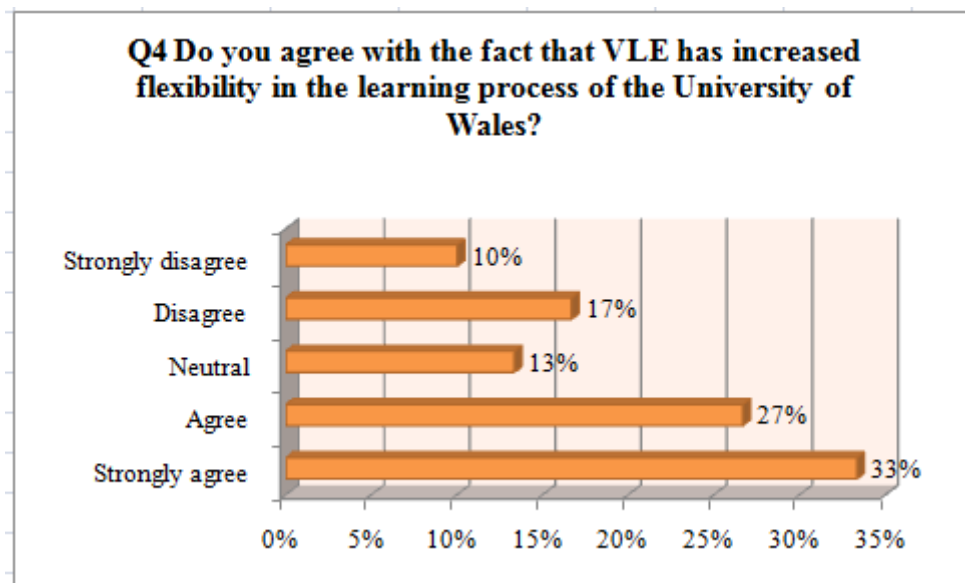


Figure 7: Response to question 4

(Source: Self-developed)

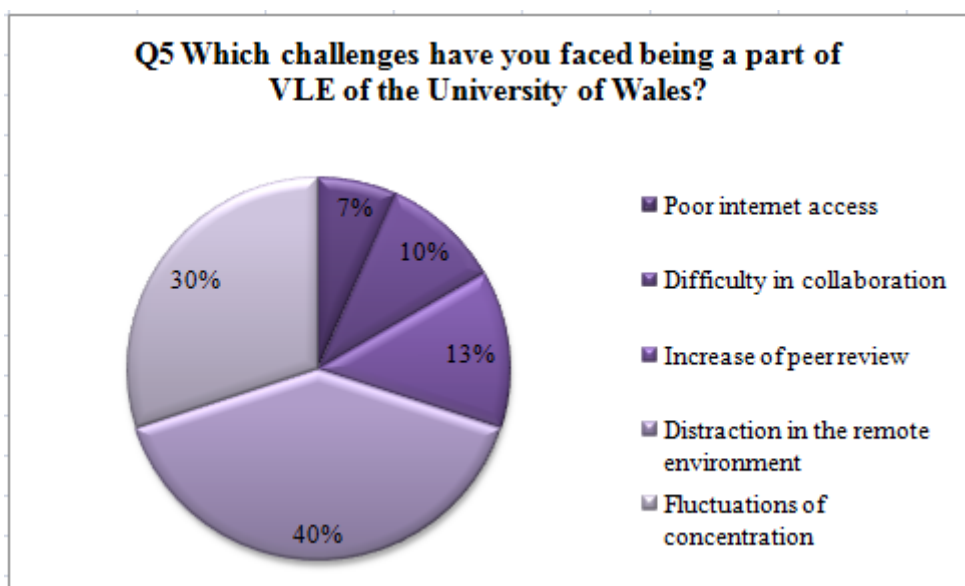


Figure 8: Response to question 5

(Source: Self-developed)

The primary data gathered from the conduction of the survey has brought the aspect that they faced the issue of the learning process during the pandemic at the University of wales with the lack of resources. 40% of the responses of students have provided the aspect from survey question 1 that during the pandemic the university has faced the challenge of having poor resources such as less availability of books in the library, and financial and material resources. This issue has therefore analysed the need for the establishment of a virtual learning environment to develop the interaction of students with the lecturer and peer in the virtual platform. Response to survey question 2 has provided the insight that a maximum of the students are strongly satisfied with the virtual learning environment offered by the

University of Wales conducted at Trinity Saint London Campus. 33% of the survey respondents have shown their satisfaction with the overall teaching-learning process conducted virtually. However, 23% of the responses were found to be neutral leaving 7% of strongly dissatisfied candidates on the campus. This has ensured the positive impact of VLE on the University campus of London. Response to survey question 3 has provided the perspective that students have acquired the skill of virtual communication. 33% of the total respondents have ensured that the implementation of VLE by the University of Wales has increased their capability to interact in the virtual platform in the remote learning environment. However, 23% of the respondents have agreed to attain dynamic communication and 20% revealed that they have learned time management skills. Eventually, 17% ensured that they have attained professionalism whereas only 7% ensured that they attained career development opportunities. Thus, it has developed the aspect that the impact of the VLE has improvised virtual coordination and has enriched the experience of the studies at the University of Wales.

Response to question 4 has ensured the fact that VLE has increased the flexibility of the learning process at the University of Wales. It has been identified from the response to the survey that 10% of the students strongly agreed that they have attained the experience of having flexibility in class scheduled at the University of Wales having a part of VLE. The response to question 5 has given the insight that distraction in remote home environments is the major issue of conducting VLE by the University. 30% of the respondents agreed with the fact that fluctuation of concentration becomes the major issue while participating in the virtual learning process. 13% of the respondents have shown that they are dissatisfied with the increase of the peer review as 10% ensured that the challenge of VLE is difficulty in collaboration. Further, 7% responded to the issue to be lack of accessibility to the internet. Hence the challenge of conducting the VLE at the University of Wales is the distraction of the students in the existing remote home environment.

Secondary data analysis

Theme 1: Depression among students has increased the scope to conduct VLE at the University of Wales

The uncertain outcome of the pandemic has psychologically impacted the students associated with higher education. The stress and anxiety among the students have increased due to feelings of isolation and being away from the transitional classroom environment.

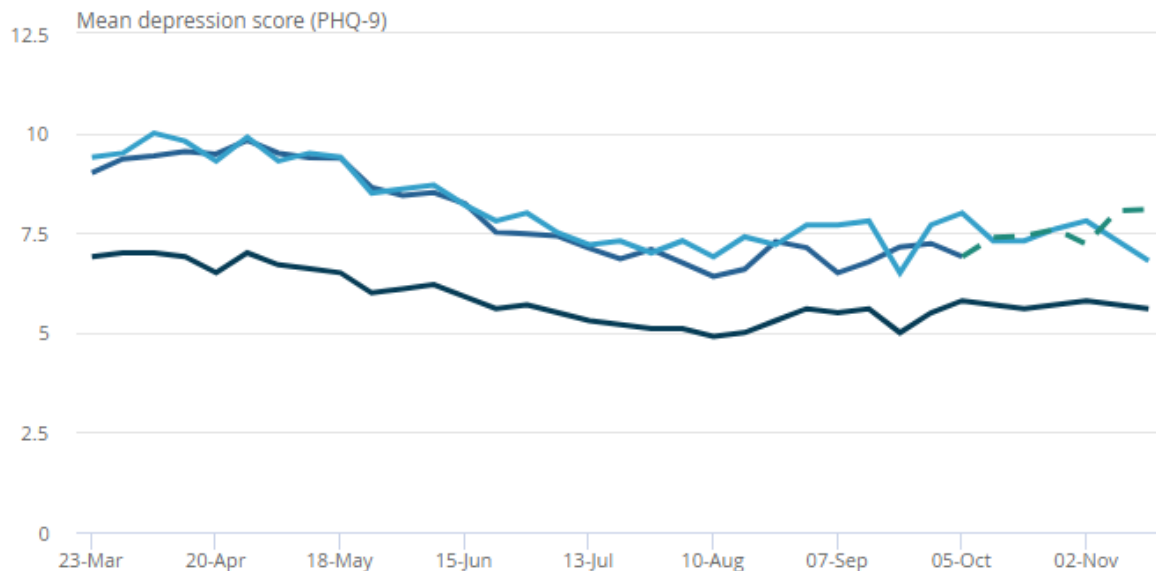


Figure 9: Margin of depression among students during the pandemic

(Source: Ons. Gov, 2020)

The graphical data has focused on the fact that students of age 18-29 have faced the issue of the psychological threat with the uncertainty of the pandemic circumstances. The increase in depression has become the cause of introducing another option by higher educational institutions to coordinate the students and introduce a virtual process of learning. According to (Hafstad *et al.* 2021), the impact of the pandemic has raised the level of anxiety and stress as they felt isolated from the social world and were feeling congested in the regular home environment. Thus, the University of Wales has felt the need for the circumstance and introduced VLE to reduce the stress among students.

Theme 2: Virtual learning environment has increased registered learners in an online platform to attain virtual collaboration by the University of Wales

The impact of the VLE has increased the scope of the learners to gain the skill of virtual collaboration through the increase of access to online platforms.



Figure 10: Number of registered learners in the online platform

(Source: We forum, 2022)

The graphical data has presented the fact that the number of registered students who have accessed the virtual learning process has increased from 2016 to 2021 by 92M (We forum, 2022). The increase in continuous access of registered students in universities is going in an upward trend and has gained momentum. According to Martin and Bolliger (2018), the virtual learning environment offers the opportunity for students to develop interaction with global students coming from different cultures and backgrounds. Thus, the impact of the VLE has supported the students in the development of virtual collaboration to increase their skills.

Theme 3: Lack of focus on studies has become the key challenge in the conduction of VLE by the University of Wales

The issues faced by higher educational institutions are the decrease in the concentration of students associated with Universities.

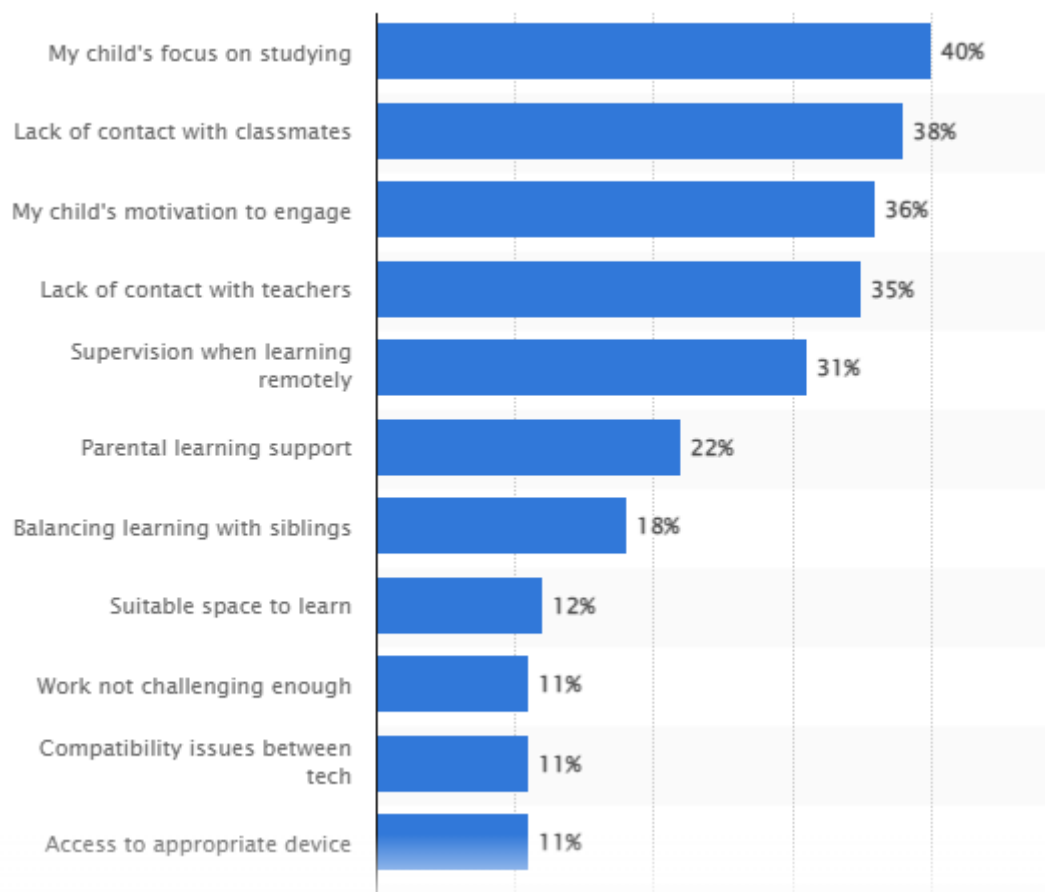


Figure 11: Challenges of learning remotely from home

(Source: Statista, 2021)

Regarding the graphical data that has showcased the survey of the parents of the candidates enrolled in higher e-learning. It has brought the aspect that 40% of the parents have ensured that students have lacked the focus to remain engaged in the e classrooms. Online distraction is the major issue in the attainment of excellence in VLE. According to Lassoued, Alhendawi and Bashitialshaaer (2020), the learners of the remote home

environment lack to interact with teachers and other peers present in the VLE. Thus the major challenge of implementing the VLE by the University of Wales is the lack of focus of students in remote home environments.

Conclusion

The report has brought up the aspect that the major issue of the University of Wales during the pandemic is the lack of available resources. The impact of the virtual learning environment is to increase the skill of collaboration in the virtual environment. Moreover, the challenge of the implementation of VLE is the lack of focus among students of the University of Wales participating in the learning process from a remote environment.

References

- BBC, (2021). *Covid has delayed the return of face-to-face learning in wales*. Available at: <https://www.bbc.com/news/uk-wales-55626542>[Accessed: 30th December 2022].
- Dhawan, S., (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of educational technology systems*, 49(1), pp.5-22.
- Ferri, F., Grifoni, P. and Guzzo, T., (2020). Online learning and emergency remote teaching: Opportunities and challenges in emergency situations. *Societies*, 10(4), p.86.
- Hafstad, G.S., Sætren, S.S., Wentzel-Larsen, T. and Augusti, E.M., (2021). Adolescents' symptoms of anxiety and depression before and during the Covid-19 outbreak–A prospective population-based study of teenagers in Norway. *The Lancet Regional Health-Europe*, 5, p.100093.
- Lassoued, Z., Alhendawi, M. and Bashitialshaaer, R., (2020). An exploratory study of the obstacles for achieving quality in distance learning during the COVID-19 pandemic. *Education sciences*, 10(9), p.232.
- Martin, F. and Bolliger, D.U., (2018). Engagement matters: Student perceptions on the importance of engagement strategies in the online learning environment. *Online Learning*, 22(1), pp.205-222.
- Mukhalalati, B.A. and Taylor, A., (2019). Adult learning theories in context: a quick guide for healthcare professional educators. *Journal of medical education and curricular development*, 6, p.2382120519840332.
- Ons. Gov, (2020). *Margin of depression among students during the pandemic*. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/educationandchildcare/articles/coronavirusandtheimpactonstudentsinhighereducationinenglandseptembertodecember2020/20-12-21>[Accessed: 30th December 2022].
- Sandars, J., Correia, R., Dankbaar, M., de Jong, P., Goh, P.S., Hege, I., Masters, K., Oh, S.Y., Patel, R., Premkumar, K. and Webb, A., (2020). Twelve tips for rapidly migrating to online learning during the COVID-19 pandemic. *MedEdPublish*, 9(82), p.82.
- Sollazzo, G., Longo, S., Cellura, M. and Celauro, C., (2020). Impact analysis using life cycle assessment of asphalt production from primary data. *Sustainability*, 12(24), p.10171.
- Statista, (2020). *Online learning participation by Gender in the UK*. Available at: <https://www.statista.com/statistics/1248800/online-learning-participants-united-kingdom-uk/>[Accessed: 30th December 2022].
- Statista, (2021). *Challenges of learning remotely from home*. Available at: <https://www.statista.com/statistics/1246857/remote-learning-during-coronavirus/>[Accessed: 30th December 2022].

We forum, (2022). *Number of registered learners in the online platform*. Available at: <https://www.weforum.org/agenda/2022/01/online-learning-courses-reskill-skills-gap/> [Accessed: 30th December 2022].

Appendix: Survey Questions

Q1 What were the issue faced by you in the learning process at Wales University London campus during the pandemic?

- Shutdown of the campus
- Lack of teaching staff
- Lack of resources
- Poor transportation
- Minimum funding

Q2 Are you satisfied with the virtual learning environment introduced by the University of Wales?

- Strongly satisfied
- Satisfied
- Neutral
- Dissatisfied
- Strongly dissatisfied

Q3 What experience have you gathered from the VLE of the University of Wales?

- Virtual coordination
- Time management skill
- Career advancement opportunities
- Professionalism
- Dynamic communication

Q4 Do you agree with the fact that VLE has increased flexibility in the learning process of the University of Wales?

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

Q5 Which challenges have you faced being a part of VLE of the University of Wales?

- Poor internet access
- Difficulty in collaboration
- Increase of peer review
- Distraction in the remote environment
- Fluctuations of concentration