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BMSW4003 DIGITAL SKILLS AND RESEARCH METHODS

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TITLE: THE IMPACT OF VLE

Moodle experience at the University of Wales Trinity Saint David

(London Campus)

Methodology

The questionnaire presented to 70 students at the UWTSD (London Campus), has been designed to collect quantitative and qualitative data. Students were requested to answer 24 multi-item scales questions (ranging from strongly disagree to strongly agree) regarding Moodle and Virtual learning environment (VLE), followed by two open-ended questions about the health issues caused by online learning and the comprehensibility of Moodle. This was used as primary data. Furthermore, many articles and books have been read and analysed as secondary data. Finally, it was made an analysis of both data.

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RESEARCH ON MOODLE AND VLE

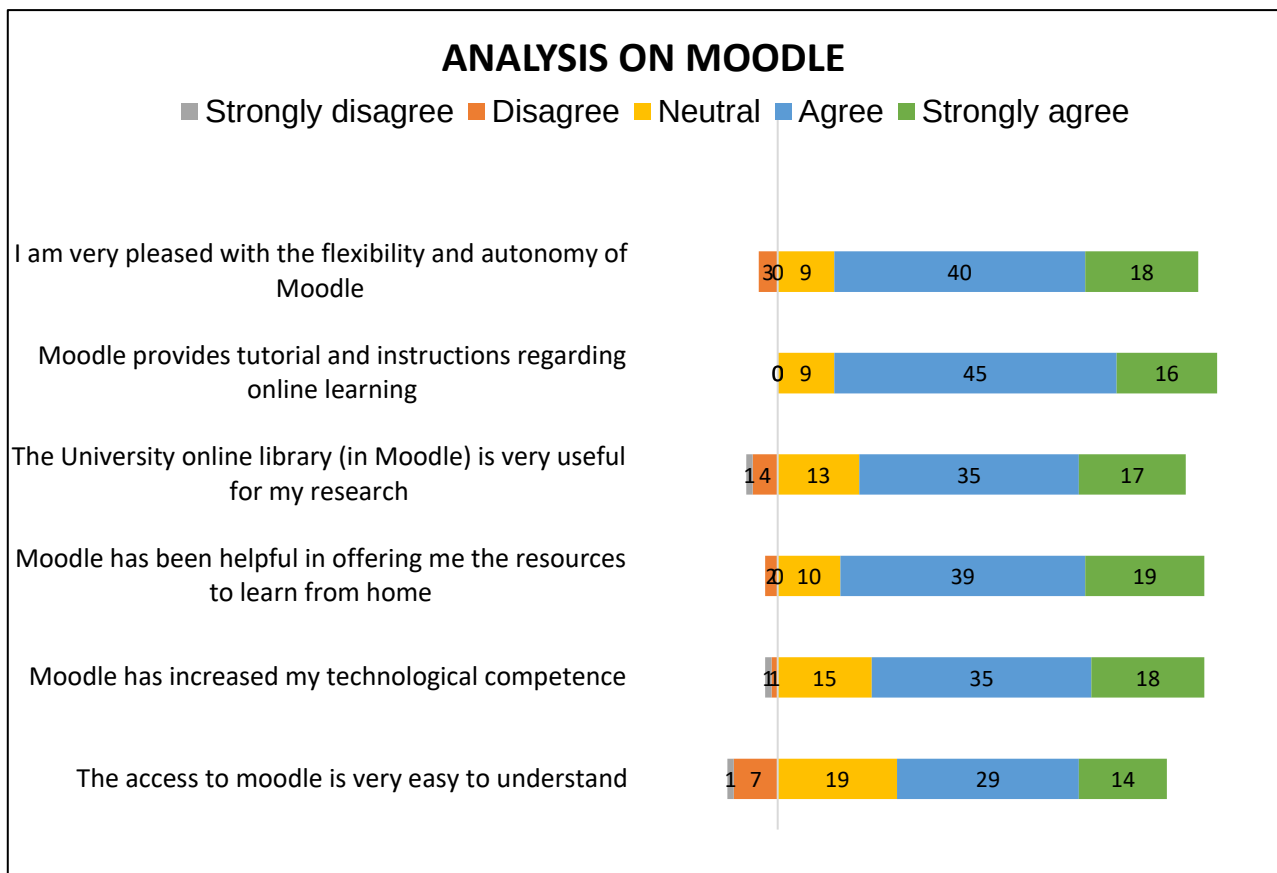


Figure N1 Impact of Moodle on students of the UWTSD (London, campus).

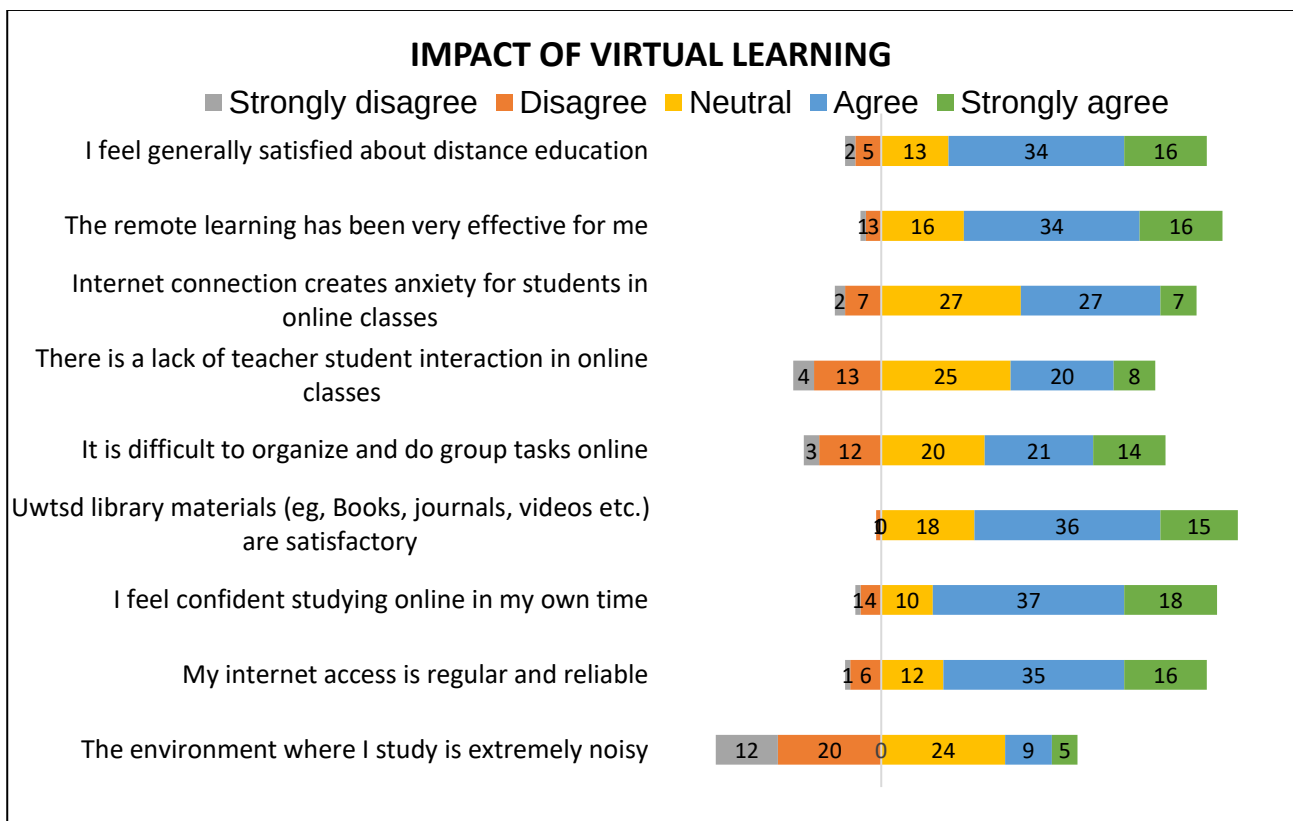


Figure N.2 Positive and negative impacts of VLE on students (UWSTD, London campus).

Introduction

With 68 million users and 55,000 sites deployed worldwide, Moodle provides personalised online learning through the technology, to implement interactions, discussions, and analysis. According to UNESCO (McCarthy, 2020), globally around 1,3billion students, were affected by the current pandemic and were not able to participate in face-to-face lessons, therefore today virtual learning environment (VLE) became very important.

Moodle (Modular Object-Oriented Dynamic Learning Environment) is the most common learning management system (LMS) designed in 2002 by Martin Dougiamas, used by educators and employers to teach through online courses and help students achieving their learning requirements, without a physical presence. The VLE allows people from all over the world to gain an education despite any health, distance, or language barriers. This assessment aims to analyse the positive and negative impacts of VLE on students, confronting the primary data (Questionnaire made for UWTSD' students, London campus) to the secondary data (Academic books, articles, and surveys), concluding with an analysis of both sources which will help in obtaining a better comprehension of Moodle and online learning.

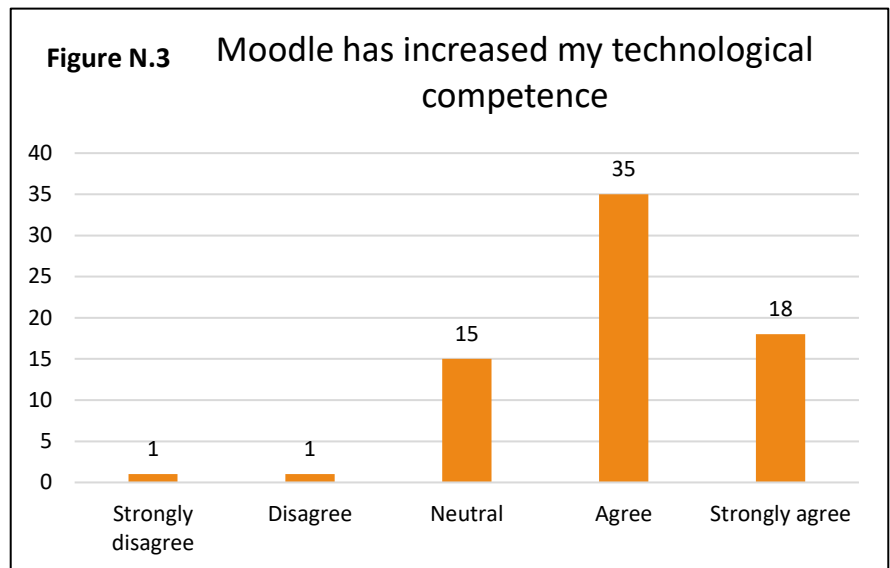
POSITIVE IMPACTS

Unlimited sources

The Virtual learning environment (VLE) supplies different services such as amenities for presenting content, online communication for assessments, students' attendances and supports, availability of additional readings and suggestions for websites and videos (Mason, 2008). Also, students have access to worldwide resources or materials (Rhode, 2007) and they highly agreed that library materials, in Moodle, are satisfactory (Figure N.1). Furthermore, all the contents for e-learning have been designed to help students memorising easily and create discussions with one another during a lesson or a group task. On the other hand, managing online learning may be challenging because students can access any type of information, and they must be able to select what is relevant by themselves. University can help students in giving them the right direction that has to be followed. For example, the UWTSD offers a wide range of sources through their library and advises students to search articles, surveys, books, and many others, through 'Google scholar' which is a reliable source for academic learning.

Students' satisfaction

In the VLE, students have time to reflect, formulate an answer and modify it as much as needed because there is no direct contact with lectures and the process is not immediate. Also, students are less vulnerable, they can manage better their emotions, due to the virtual environment. They may be switching the camera off and ask questions without fear of being judged. As a result, some students believe that online communication facilitates the manifestations of concepts that they would not have shared in face-to-face lessons (Jones and Madden, 2002). Others correlate their satisfaction to the technical competencies (Mason and Rennie, 2008). Although students of the UWTSD (London Campus) expressed their low ability to use e-learning effectively due to a lack of computer skills, they also affirmed that Moodle provides tutorials and instructions (Figure N.1) to help them overcome this situation. Subsequently, through Moodle, they have been able to enhance their technical skills (Figure N.3) and feel overall satisfied with distance education (Figure N.2).



Flexibility and Time saving (Moodle)

Moodle has been designed to give learners the opportunity to access from everywhere and students (London Campus) have found it very easy to understand (Figure N.1). In distance educations, the information is delivered by various devices such as laptops, tablets, e-readers, and mobile phones. This helps students to avoid commuting to reach University's campus saving money and giving them full flexibility to study at any place, by simply using an internet connection (Ally, 2004). This has been confirmed by the survey where students of the UWTSD, London Campus mainly study from home, in a quiet environment. Also, having the accessibility to online learning 24hours a day, seven days a week allows learners to study at their convenience, but this required high motivation.

Development of new skills

Self-regulation and self-direction are two of the main skills students can obtain from the VLE, which should be recognised as the base of the actual technological society (Liew, J. et al. (2010). It is essential to develop these skills, through online materials, studies, and search techniques (Mason,

2008). Students of the UWTSD are trained and encouraged to use their Academic competencies, such as Time management and digital skills to overcome the negative characteristic of e-learning. Indeed, as the figure (N.2) shows, they feel confident to study online in their own time. According to Barbara Duth, other skills that could be enhanced with e-learning are defined as critical and analytical. Problem-based learning (PBL) is a didactic approach to the real world's complications. Concerning assessments, one of these issues is plagiarism and it is hard to assume the honesty of a student. Because of this, Turnitin (Moodle) was designed to detect falsifications and it can help learners to study and improve their academic writing (Abrahamson and Mann, 2018). Also, this tool facilitates students to submit assessments online and receive instant feedback.

New opportunities for everybody

Other aspects to consider about the VLE are disabilities and language barriers. Thanks to e-learning it was possible to concentrate a wide range of people and to create a multicultural environment. The Special Educational Needs and Disability Act 2001 made it illicit to discriminate against students with a special condition. Therefore, the UWTSD, through Moodle, offers various disability support and English courses. For example, learners who have disabilities may found problems making PP presentations, but with the University's support, they can add speaker notes or describe the presentation by a screen reader. Also, students with mobility impairment can qualify through online learning without worry about commuting. Furthermore, non-native speakers found online classes very constructive as they can improve their learning by online English courses and reviewing course materials, through Moodle, for as much time as needed (Figure N.1). There is no discrimination for age, gender, race, and appearance.

Low emissions

As reported by the National wildlife foundation, paper corresponds to 60% of schools' wastage. (Hung, 2015). Using technological devices, institutions are saving disposable. Also, as reported by a research of Britain's Open University, thanks to online learning, energy consumption is reduced by up to 90% and produce 85% fewer CO2 emissions compared to traditional teaching (Roy, R. at al. (2005). In the VLE, students take classes from home as a result, the use of cars, buses and trains have been highly reduced.

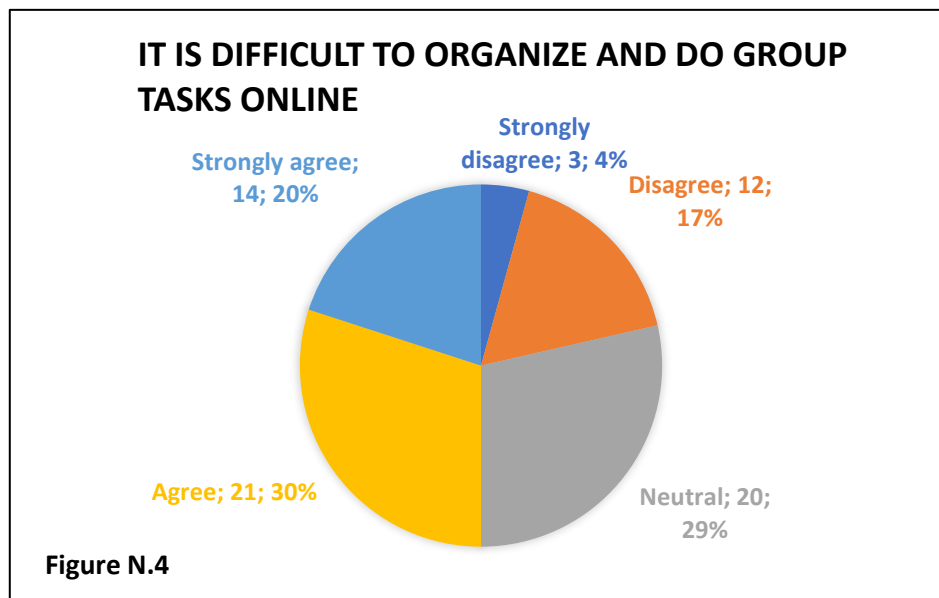
NEGATIVE IMPACTS

Lack of interaction and sense of isolation

Interaction is an essential part of the education process, besides creating the same dynamics of face-to-face learning, may be very challenging (Oblinger & Hawkins, 2006). In the VLE there is a lack of discussions (Mason, 2006) therefore, it is fundamental to find a way to keep e-learning, as an interactive environment. As shown in the graph (Figure N.2), students of the UWTSD feel a lack of teacher-student interaction in online classes. This might be one of the reasons why some of them feel isolated. Without the usual physical separation between home and class, students may experience a sense of trap and isolation. In addition, they are not able to develop their social skills due to the virtual environment.

Group activities

According to Coomey and Stephenson (2011) that had analysed VLE in higher education, few leading points for a good online environment should be considered. Firstly, “dialogue” which the UWTSD provides through emails and real-time chats (Microsoft Teams). Secondly, “support” which



includes online tutorial supervision, advice, feedbacks from lecturers and regular virtual facing connections. Finally, “involvement”, which can be express by small groups activities proposed, for instance, as group presentations. In contrast to the benefit

of interaction with groups activities, conflicts in virtual groups, delay of communications and interpersonal conflicts are the main disadvantages. As shown as in figure N.4, more than 50% of students of the UWTSD encounter the same problem and this can create disagreements and tensions among group members (Cohen and Bailey, 1997) which if not handled appropriately, can transform the task conflict into a relationship conflict (Zhu et al., 2019).

Health issues and distractions

Prolonged time of sitting can cause different health issues such as dry and itchy eyes, headaches, and bad posture. However, according to the survey, students of the UWTSD have not encountered these problems because most of them can follow classes from different devices by using Moodle. In addition, in the VLE, learners may experience various distractions (social media and chatting). It

follows that they may lose focus on the lesson or task. Also, with online learning, it is easier to cheat and browse answers for the class activities and this can cause a loss of critical thinking skills. However, some surveys have demonstrated that online learning helps students to develop critical, creative, and self-learning skills (Khan and Setiawan, 2019).

Technical issues and cost

Many students, with the VLE, encountered internet connection issues (Korkmaz and Toraman, 2020). As reported by the survey's answers, students have a reliable internet connection (Figure N.2), but sometimes this can cause anxiety because they can miss attendances or have issues going live during a presentation or an activity. For example, during the first term, students of the Uwtsd (Group 3) have lost connections many times and due to the impossibility to answer to the attendance, they have been marked as absent by the lecturer. This can be solved by contacting the IT service that students can find in Moodle or connecting to online lessons, with mobiles by using private connections. Furthermore, some students can have economic issues and it might be difficult for them to have access to technological devices. Other students, especially from rural areas, may have a low speed or limited internet usage and having the chance to study for as long as they need, might be impossible due to the high cost.

Freedom of the online education

With the VLE there is a different perspective of education. In traditional classes educators manage lessons and activities, in contrast, in online learning, lessons are designed and controlled by the institution. In the UWTSd, lecturers have a fixed time to explain slides, with not much freedom to express the learning at their convenience. Moodle allows students and lecturers to manage the education from everywhere, however, it keeps a physical separation. Typically, students are inspired by the educator, but with the online learning environment, they obtain an education programmed by someone else (Khoo et al. 2010).

Authenticity

Some students copy people's ideas and make them their own without citing sources. As mentioned before, Moodle offers 'Turnitin' that has been created to identify plagiarisms, but it only establishes similarities to other online sources. It is almost impossible to understand if a student's assignment is original or if it is made by another person. The introduction of the internet with unlimited sources gave students' the possibility of cheating. (Forsyth et al. 2018) The lectures' experience is the only way to analyse and determine a student honesty.

Conclusion

The survey presented to Students of the UWTSD (London campus) affirmed being satisfied with Moodle because gives them flexibility and accessibility to vast online information. In addition, by using Moodle, the UWTSD can offer many courses, supports, academic literature and rapid feedback. Moreover, having disabilities, a language barrier, and no access to a nearby university may also cause learners to prefer online learning. Also, considering the environmental pollution that the world is facing today, e-learning can be a great alternative to face-to-face lessons. Despite these positive aspects, the VLE can create a sense of isolation and due to poor interactions between students-lecturer, social and communication skills risk being lost. With an appropriate designed course, there is the opportunity to create more dynamic and interactive activities even though, this gave lecturers less freedom to express and direct lessons as they believed is more appropriate. Furthermore, online learning cannot be easily controlled, it is hard to create a group environment and it gives students the possibility of cheating during class activities and assessment writing. This can be partially controlled, through Moodle which has Turnitin to detect similarities and help students of the UWTSD, to improve their academic writing. Finally, online learning has positive and negative impacts on students but considering this pandemic era, it allowed students to continue their studies. With Moodle students of the London Campus, confirmed they can study and access many online courses at their convenience, and improving the negative aspects of the VLE, it may be easier for students worldwide to achieve their learning goals in future.

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