APPLYING MOODLE TO BUILD UP E-PORTFOLIOS IN TEACHING AND LEARNING "METHOD OF WRITING RESEARCH PAPERS"

ỨNG DỤNG MOODLE ĐỂ TẠO HỒ SƠ ĐIỆN TỬ CHO MÔN HỌC "PHƯƠNG PHÁP NGHIÊN CỨU KHOA HỌC"

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ABSTRACT

This article aimed to find solutions to help students store their works effectively and help lecturers accurately monitor students' research writing process through using Moodle as an E-portfolio in the teaching and learning process. The research participants included 165 third-year students majoring in Business English, Pedagogy, and English for Logistics at the Faculty of Foreign Languages, Ho Chi Minh City University of Foreign Languages and Information Technology (HUFLIT). The action research was adopted for 12 weeks, and quantitative and qualitative data were collected by surveys, interviews and observations. The results show that storing articles and managing classes using Moodle for the subject "Method of Writing Research Papers" at HUFLIT is effective and receives positive responses from students. The research findings encourage lecturers and students at the university level to apply technology to the teaching and learning process to improve learning quality and work efficiency.

Keywords*: Moodle, e-Portfolios, classroom management, English teaching and learning.*

TÓM TẮT

Bài báo trình bày nghiên cứu giải pháp giúp sinh viên lưu trữ bài viết hiệu quả và giúp giảng viên theo dõi quá trình viết nghiên cứu của sinh viên chính xác thông qua việc ứng dụng Moodle làm hồ sơ điện tử vào quá trình dạy và học. Đối tượng nghiên cứu bao gồm 165 sinh viên năm 3 chuyên ngành Sư phạm Anh, Tiếng Anh Thương mại, Tiếng Anh chuyên ngành Logistics thuộc Khoa Ngoại ngữ, Trường Đại học Ngoại ngữ - Tin học TP.HCM (HUFLIT). Tác giả sử dụng phương pháp nghiên cứu hành động (action research) trong suốt 12 tuần thông qua hình thức lấy số liệu định lượng và định tính như khảo sát, phỏng vấn và quan sát. Kết quả cho thấy việc lưu trữ bài viết và quản lý lớp học bằng Moodle đối với môn "Phương pháp Nghiên cứu Khoa học" tại HUFLIT thật sự hiệu quả và nhận được sự hưởng ứng tích cực từ sinh viên. Tác giả bài báo khuyến khích giảng viên và sinh viên ở bậc đại học nên áp dụng công nghệ vào quá trình dạy và học nhằm nâng cao chất lượng học tập, hiệu quả làm việc.

Từ khóa*: Moodle, hồ sơ điện tử, quản lý lớp học, dạy và học tiếng Anh.*

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1. INTRODUCTION

"Method of Writing Research Papers" is a mandatory subject at most universities in Vietnam in general and at Ho Chi Minh City University of Foreign Languages and Information Technology (HUFLIT) in particular. For students majoring in English language at the HUFLIT Faculty of Foreign Languages, "Method of Writing Research Papers" is a subject of significant importance to help students understand and apply research to subjects specializing in Business English, Pedagogy, Logistics, Graduation Paper, and later Master thesis, Doctoral thesis.

However, teaching and learning the subject "Method of Writing Research Papers" put pressure on both lecturers and students in the grading and writing stages of having to teach and learn many different subjects at the same time. Lecturers do not have time to read and critique each student because of the large class sizes and many classes. Students do not have enough time to research, collect data, analyze and write full papers. Since then, many lecturers do not like to teach this subject, many

students are not passionate about research and if required, they only teach and learn in a reactive way to complete their obligations and pass the subject.

In addition, storing articles properly, scientifically and economically is also a big problem for most lecturers and students. With a big number of documents such as reference articles, draft articles for each chapter and spread throughout a semester, it is not easy to systematically save them as evidence of non-plagiarism for students without the help of technology. Grading papers and monitoring students' research progress will be more convenient when lecturers thoroughly apply technology to this subject.

From the difficulties mentioned above, the author applies action research methods to her courses to find effective technological measures in teaching and learning the subject "Method Of Writing Research Papers", help lecturers reduce the workload of monitoring the research process and marking students' assignments, help students save research documents scientifically and effectively. The research questions are as follows:

1. In some extent, does Moodle technology help lecturers and students teach and learn the subject "Method of Writing Research Papers" effectively?

2. How effective is using Moodle technology to build e-Portfolios help instructors manage students' work?

3. At what levels does using Moodle as e-Portfolios help students to store their works effectively and increase the passionate in learning "Method of Writing Research Papers"?

2. LITERATURE REVIEW

2.1. Definition of e-Portfolios and the importance of them in teaching and learning

According to Yancey [6], electronic portfolios, which are called e-Portfolios, are successors of print portfolios. They originated near the turn of the century. E-portfolios generally refer to digital dossiers, in which students compile and reflect upon multimodal artifacts to review their learning journeys. In 2004, Yancey sorted e-Portfolios into three types, such as print versions uploaded digitally, online assessment systems (e.g. institutional portals), and Web-based portfolios (e.g. open-source systems).

Hockly and Dudeney [7] mentioned the three advantages of e-Portfolios in pedagogy. Firstly, pedagogical innovations are high on the reform agenda and e-Portfolios are a feasible approach to revolutionize

language teaching. Secondly, using digital media to deliver lessons appears to be an irreversible trend in the technological era. Last but not least, e-Portfolios and print portfolios have become one prominent embodiment of the assessment for learning movement, wherein students are encouraged to self-regulate their learning with e-assessment feedback and other semiotic resources.

Bachman and Palmer [8] indicated that e-Portfolios can be highly evaluated in language assessment, for instance, validity, reliability, washback, and practicality given that students have the autonomy to collect, select, and reflect upon evidence of learning to fulfil the formative purpose. Moreover, McGarr and O'Gallchoir [9] also suggested that e-Portfolios are supposed to spawn positive washback on language teaching and learning because they can constructively align pedagogy and assessment, namely, coaching students to self-assess their learning metacognitively.

2.2. The importance of technology -Moodle- in English teaching and learning

Moodle is a flatform of Management System (LMS) or a free Open-Source course management system (CMS) or Virtual Learning Environment (VLE) which is based on Modular Object-Oriented Dynamic Learning Environment. It is a famous tool for creating dynamic online web sites for students and educators around the world. Moreover, Moodle flatform is an E-learning project described as a course management system. It is designed to help teachers create effective online communities for true learning. The main resource is training, based on weekly lessons and activities. Teachers and students can go page by page or chapter to another one using the "Quick jump". At the end of the course module, both teachers can insert a module evaluation [1].

Thanks to Moodle, teachers can design the test questions flexibly and effectively, for example, true or false, multiple choice, gap-fillings, questions with a single correct version, etc. According to Teo et al. [2], the Moodle online learning platform has numerous free tools and an enjoyable learning experience for students and teachers, which has become prevalent in almost all countries. Moreover, Taamned et al. indicated that the Moodle platform is currently adopted in the researched universities due to the implications of the Covid-19 pandemic on higher education to ensure the educational process's continuation and adaptation to the global pandemic [3]. Gogan et al. [1] also said that Moodle has plenty of pedagogical advantages because it was built in

accordance with the teaching and learning approach which emphasizes the construction of knowledge through active and interactive learning and learning multi-sensory experience through multimedia. Its goal is to provide a set of tools that support an inquiry and discovery-based approach to online learning. In a nutshell, it supports creating an environment that allows for collaborative interaction among students as a standalone or in addition to conventional classroom instruction.

In general, Moodle offers teachers excellent tools to manage and promote learning and allows organizing, managing, and delivering course materials, therefore, it is called a friendly environment. Teachers can provide students with a large number of resources that they cannot show in the classroom because of time limitations. Liguori and Winkler [4] concluded that the universities' efforts ranged from imposing safety procedures to enhance campus-wide meeting learning to more drastic actions by suspending large-scale and public meetings, workshops, and conferences. Moreover, lessons tasks within Moodle can be linked to any resources that are uploaded to one's server or that are available on the Internet. The students' exploration of any of the content-based resources can be easily accessed by using any of the Moodle based evaluation and feedback tools. Costa et al. [5] used to mention that Moodle allows the exchange of information among users geographically dispersed, through mechanisms of synchronous (chats) and asynchronous communication (discussing forums).

3. METHODS AND MATERIALS

3.1. Participants

The participants of the innovation are 165 juniors who learnt with the author. 55% is female and 45% is male. Although they are from three different majors of the Faculty of Foreign Languages (FFL), they still learn the same compulsory subject which is research methodology. All of them are from three different majors of the Faculty of Foreign Languages (FFL), such as, Business English, Pedagogy, and English for Logistics with the percentages like 55%, 35%, and 10% respectively.

3.2. Statistical treatment

Data collected from qualitative methods were analyzed appropriately to clearly see the effects of using Moodle as a tool to save documents during the time of the innovation. Each question was analyzed one by one. Similar answers were counted and converted to percentage out of 100 percentage. The final result then turned into a bar chart. Pie charts were applied to some question types to make the results appear clearer and easier to compare. For questions that required short answers, the writer summarized the answers and converted them into a table.

3.3. Innovation Description

As mentioned in the introduction, storing documents properly, scientifically and economically is also a big problem for most lecturers and students. With a lot of documents such as reference articles, draft articles for each chapter and spread throughout a semester, it is not easy to systematically save them as evidence of non-plagiarism for students without the help of technology. Therefore, the author applied Moodle as an online tool to build up e-Portfolio to save all students' documents as well as observe their process during semester two from March 1, 2024 to May 18, 2024.

At the first session, the researcher presented the innovation for her students with the purposes, methods, and the ways of assessment and evaluation for the subject. Thanks to their acceptance, the innovation was applied smoothly. After each lesson, the lecturer gave them onsite and homework to write, for example, cover, table of contents, abstract, introduction, literature review, methodology, findings and discussion, conclusion and recommendations, references, appendix, etc. Students submitted their work, the lecturer exchanged randomly their works among students, students had to peer-edit basing on the rubrics the lecturer showed on the projector screen. After that, students rewrote their works and uploaded them to the ASSIGNMENT tool that the lecturer created in advance. With the same procedures, during twelve weeks, students had eight drafts of twelve parts of the full research. Then they had to print the full article out and submit it to the lecturer for scoring at the last session of the semester. This is a compulsory action for the later inspection. Attendance consists of 10%, drafts make up 40%, and the full article is account for 50% of the total score because no final test for the subject "Method Of Writing Research Papers" at HUFLIT.

4. FINDINGS AND DISCUSSION

In question one, *How do you feel when the instructors calculate course grades based on Attendance (10%), Drafts (40%), Full Papers (50%)?*, 45% of students chose "completely agree", 45% of students answered "agree" and 10% said that they did not "completely disagree". It means that almost all students in the three classes were satisfied

with the innovation assessing students by two factors, hardworking and competence. If students join in all sessions and submit all drafts to the Moodle's assignment section created by the lecturer every week, students will have 50% of the total score. This method helps students have a good habit for their future job that is saving all documents in a safe place, which is called e-Portfolio. However, competence is also an important factor in work. This is the reason why 50% is for the full article that students must submit at the end of the semester. Therefore, hard work and competence are evaluated and assessed the same for this course.
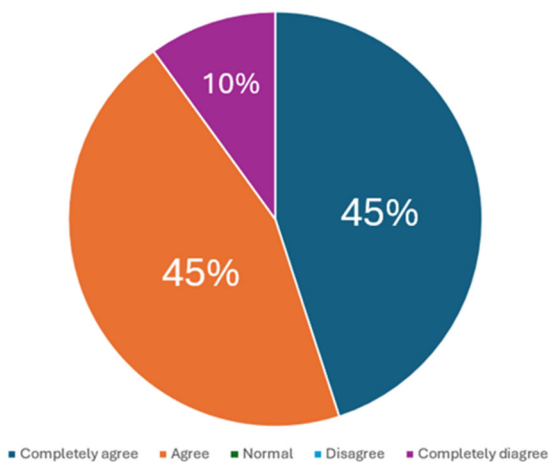
Figure 1. Satisfaction with the course assessment and evaluation

For the question two, *Do you prefer to write on paper and keep drafts in a hard folder or write in word and save in a soft folder?* 80% of students chose soft folders while hard folders were chosen by 20% of respondents. This percentage shows that students in the modern age 4.0 like using technology in learning and teaching rather than the traditional ways. Using paper is not preferred in the high-tech teaching and learning environment like HULFIT anymore. Free Wi-Fi is everywhere, using Moodle as a tool to save documents called e-Portfolios is applied effectively by HUFLIT's teachers and students. E-portfolios help teachers and students manage finance, time, learning and teaching process efficiently. However, there are some students who do not think e-Portfolios are a good way for them to store documents. This number accounted for 20%. As mentioned above, HUFLIT is a private university in Ho Chi Minh city, most of the students here are from the other provinces and their families are middle class or workers or farmers. Therefore, the thing that each student possesses one laptop to study is impossible. With this innovation, after the theory, students must write their work onsite, for example, the

introduction, literature review, methodology, findings and discussion for each figures, conclusion, etc., as a result, some students must go to the library to practice, some students use smart phones to type their work, and of course, they do not feel happy with this method of learning. This is the reason why these students preferred writing on paprer and save documents in hard holders.
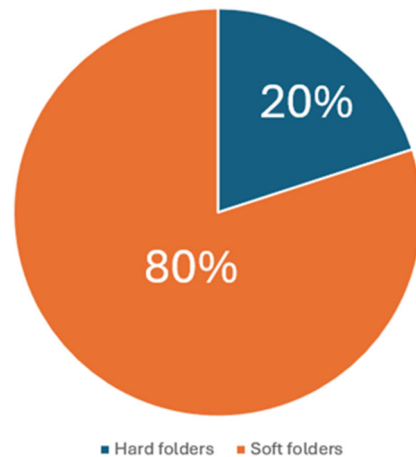

Figure 2. Preference for hard and soft folders

Moving to question 3, *In your opinion, it is appropriate for lecturers to apply an electronic portfolio (e-Portfolio) for the subject to save drafts*, 35% of students indicated that they "completely agree", 60% of students said "agree", and 5% of students chose "completely disagree". The positive attitude for using e-Portfolio as a tool to save documents online for the subject accounts for 95%, which implies that the lecturer used a suitable way to save documents. The rest negative percentage, 5%, perhaps falls into 20% of students who did not prefer e-Portfolios because of their finances. It means that e-Portfolios can only be applied smoothly and efficiently when students' finances are stable, their IT knowledge is good enough and the support from schools is sufficient, such as free wifi and Moodle.
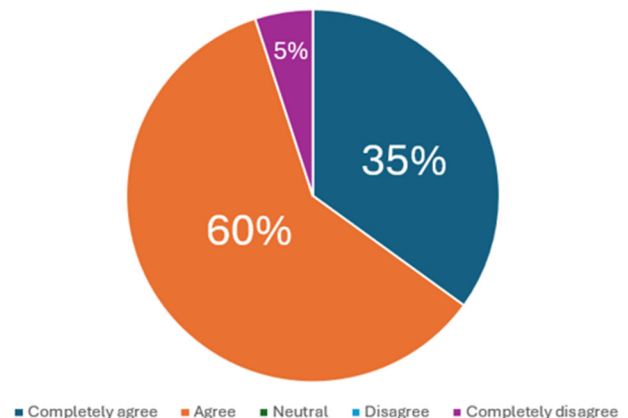

Figure 3. The suitability levels of using e-Portfolios for saving documents

In the question 4, *In your opinion, what can be saved by using an electronic portfolio (e-portfolio) for subject?*, 85% of students said that they saved time and money during the semester, 10% of students chose time only, and 5% thought that they did not save time and money when using e-portfolios in the subject. The percentage in question 4 is completely suitable for the percentage in question 3. As discussed in Figure 4, some students without laptop had to use smart phones to type their work or go to the library to work instead of sitting at the classroom after learning theories. Working on smart phones is not easy, especially for those who are not familiar with technology. For students who had to come to the school library to work and then return to the classroom to continue their learning chose "neither of time nor money" is not surprising. However, the percentage of students who did not recognize the benefits of e-Portfolios is not big enough for the lecturer to stop the innovation.
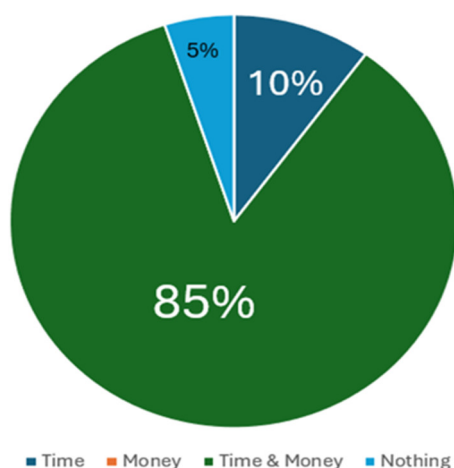

Figure 4. The benefits of e-Portfolios in learning

Do you see Moodle as a tool to increase interaction between lecturers and students? is question 5 in the questionnaire. In this question, 55% of students chose the "normal" level, 45% of students answered "agree" while no one said negative options like "completely disagree", "disagree" as well as the most positive one as "completely agree". The results reveal that Moodle is not really an effective tool to increase the interaction between the lecturer and students like the author hoped to achieve before doing the innovation. The results from this question and the fact the author collected from the observation during 12 weeks of the innovation indicate that using Moodle as an e-Portfolio to save documents is a safe and private way but not a good place to interact together like Microsoft Teams. Students did not like using

Moodle Forum to discuss with their classmates or the lecturer, instead, they chose Zalo to interact daily.
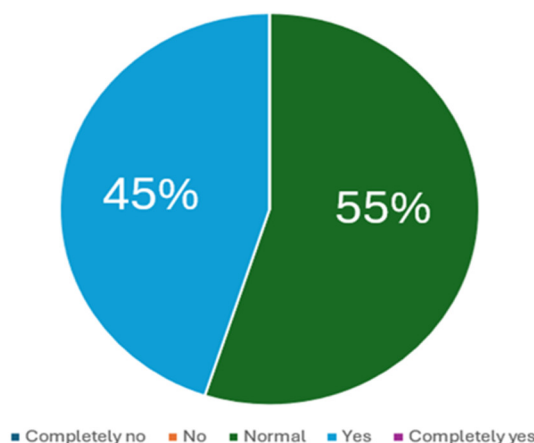

Figure 5. The interaction levels between lecturers and students via Moodle

Question 6 asks about the scientific and effective features of using Moodle as a tool to save documents, *Do you find using Moodle as a tool to save students' works scientific and effective?* 20%, 55%, 20%, and 5% are the percentages that students chose for "agree", "completely agree", "normal", and "disagree" respectively. 75% of students evaluated Moodle positively, 20% of them indicated that Moodle is neither useful nor harmful, and 5% of students answered useless. This means that using Moodle as an e-portfolio scientifically and effectively is true only when the learners have good finance and IT background, if not, technology is an obstacle for them in the learning process. Therefore, the researcher suggests that learners should consider their finances carefully before choosing universities to study, especially the ones in big cities like Ho Chi Minh city and must equip themselves with a high-tech background if they want their learning process to become smooth and effective.
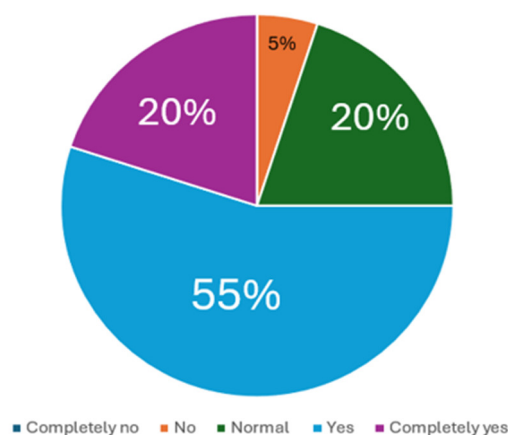

Figure 6. The scientific and effective features of using Moodle as e-Portfolios

Question 7 is also the last question in the questionnaire, which is *What did you learn throughout the semester?* This question mentions knowledge and skills that students can achieve during innovation. The results are so surprising for the researcher because 5% of students answered that they learnt "nothing", 5% of students said that they learnt "the ways to create e-Portfolios" while 20% of them learnt "the methods of writing a journal", and the rest of 70% learn both including "the methods of writing a journal" and "the ways to create e-Portfolios" during the 12 weeks of the innovation. After checking the attendance list, the author discovered that 5% of students who said that they learnt nothing from the course were usually absent from class, did not write anything, and almost never submit their work on Moodle. As a result, they did not understand the process of writing a scientific article and the ways to create an e-Portfolio on Moodle.
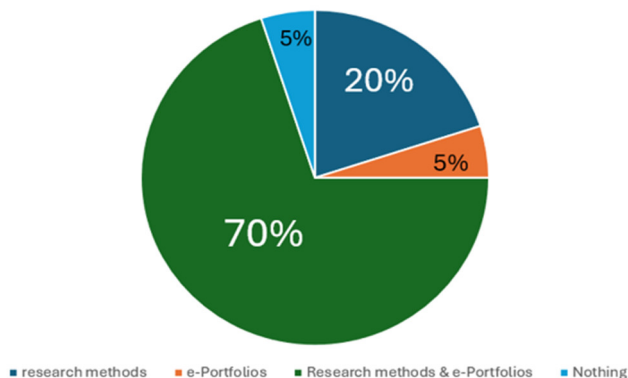

Figure 7. Knowledge & skills learnt throughout the semester

5. CONCLUSION AND RECOMMENDATIONS

In a nutshell, applying technology like using Moodle as an e-Portfolio helps the lecturer and her students more love teaching and learning the subject "Method of Writing Research Papers" at HUFLIT because of its benefits, for example, time and money saving, secure document storage, and easy class management process.

Besides the benefits that using Moodle as an e-Portfolio bring to the lecturer as well as students, Moodle also has some drawbacks and limitations, such as, weak Internet making students unable to upload their works smoothly, the interaction between the lecturer and students is not as good as the one of the other software like Microsoft Teams or Zoom or Google Meet, lack of finance and IT background leading to low effectiveness. However, using Moodle technology to build e-Portfolios also helps the author manage her class more effectively in some ways. Moreover, using Moodle as e-Portfolios

helps her students to store their work effectively as well as save their money and time. As a result, it increases the passionate in learning "Method of Writing Research Papers".

Therefore, the researcher recommends that the administrators of universities should invest in technology more efficiently, hold regular workshops and seminars for their lecturers and students to enhance their knowledge and skills of Information Technology. With the student-centered teaching and learning methods often applied in most universities these days, students themselves must be easy-going to adapt with the modern teaching methods, equip with new high-tech knowledge that the lecturers apply for the subjects, and finally, students and parents must prepare enough finance for a long learning process at the level of university.

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THÔNG TIN TÁC GIẢ

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Khoa Ngoại ngữ, Trường Đại học Ngoại ngữ - Tin học Thành phố Hồ Chí Minh