A case study of learners' perspectives on ePortfolios as a learning tool in a Technical University

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ABSTRACT: Graduate quality is an element that has received tremendous attention in the education landscape today as it is increasingly critical for undergraduates to develop these abilities at the workplace. Graduates require hard talents as well as graduate characteristics. This study looks into the influence of using an ePortfolio as a tool to help Information Technology students develop their graduate qualities in communication, critical thinking, problem solving, and teamwork. The study aims to look into students' perspectives on using an ePortfolio as a learning tool in a subject. At the end of the course, 13 students were interviewed in order to collect data. A majority of learners agreed that using an ePortfolio had assisted them in improving their learning, particularly in communication, critical thinking, problem solving, and collaborative abilities. This demonstrates how an ePortfolio can be used to help students improve their graduate characteristics while learning.

Keywords: *ePortfolio*; *Graduate attributes*

1. INTRODUCTION

It is necessary to design an innovative teaching and learning approach that allows students to participate actively in the learning process as digital technology advances. The Malaysia Education Blueprint (2013-2025) [1] emphasises the importance of innovative teaching methods in the development of great human capital in the current 21st century. ePortfolio has been upgraded from simple repositories for showcasing professional development, achievement and assessment to creating a platform for students to develop an online profile and which would serve as a possible learning device to enhance learning [2]. Several studies on the effect of ePortfolio implementation on learners' learning have been accomplished [3, 4].

The recent job market in Malaysia requires the graduates to be more competent thus needing the necessary graduate attributes. However, many bosses have complained that learners do not have the required skills crucial for employment such as communication, problem solving, and team work skills [5]. A similar concern was raised on the issue of employability among graduates especially when they are not able to secure jobs once they graduate [6, 7, 8]

This research investigated the impact of an ePortfolio in a technical communication course to improve Information Technology students' graduate attributes in communication, critical thinking and problem solving and teamwork skills. The aim of the study is to seek the learners' perceptions on ePortfolio as a device in a course.

2. METHODOLOGY

This study applied the interview methodology which is a qualitative research. This research used a case study to investigate the learning process in constructing an ePortfolio by using the adapted Plan-Do-Review cycle [9] as presented in Figure 1.

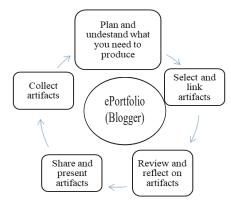


Figure 1 Model of theoretical framework on ePortfolio process (adapted from Pallister [9]

The participants of the study encompass third semester students pursuing degree in Bachelor of Information Technology in UTeM. One class of 65 students as informants enrolled for a technical communication course as a requisite of their programme. A total of 13 respondents were chosen based on a purposeful sampling method. The selection is based on their active participation in their ePortfolio. The researchers revised the existing technical communication syllabus by embedding ePortfolio throughout the 14 study weeks of the semester. Students were required to create their own ePortfolio via blogger. Blogger is chosen for this study because the students are familiar with blogs, it allows them to design and create their artefacts in their own creative ways because they have been equipped with the

necessary web authoring skills from their ICT course, and it is simple to manipulate because the user interface is friendly. They were requested to include artifacts such as pictures, photos, documents and videos to be hyperlinked and saved in their ePortfolios. They were guided step-by-step to create their ePortfolio. The students deployed cognitive approaches in the learning process as they selected, collected, built and combined the information that they had gathered[10]. The individual student was interviewed for 30 minutes. The interview was transcribed based on their raw data. By exploring the transcripts for similar themes or categories, an analysis was conducted using the grounded theory concept.

3. RESULTS AND DISCUSSION

The analysis showed that a majority of the learners had an optimistic feedback about the ePortfolio used in the course. During the interview, all students stated that they were aware of the importance and utility of using an ePorfolio as a learning tool. The students collected and included the artifacts in their ePorfolio such as cover letter, resume, biodata and reflection entries. They stated that ePortfolio has helped them to improve their oral and written communication as well as comments and feedback given by their friends has helped them to improve their learning. The meaningful feedback from their friends has helped them to enahance their artifacts in the ePortfolio. The interaction in the class has also improved their oral communication. Students also claimed that the ePortfolio is useful to them in the learning process. The tool is user friendly as students can share everything with their peers, generate new ideas when they browsed their peer's ePortfolio, create and design their own ePortfolio.

On the other hand, the learners also provided the disadvantages of the ePortfolio. The learners stated that they disengaged with eportfolio when there was no internet connection. They also found that creating an ePortfolio in the initial stage was a setback for them as they did not familiar with eportfolio. They also commented about the limitation of the blogger as it has few designs and so, restricted their ideas and creativity to add artifacts in their blogs. Thus, the data collected showed that ePortfolio has helped the students to improve their communication, critical thinking, problem solving, and teamwork skills.

4. CONCLUSIONS

The aim of the study is to find out the student's perception on ePortfolio as a learning tool in a technical communication course. This study was successful in answering the research questions, with students agreeing that using an ePortfolio to increase their learning is useful. This study shows that the ePortfolio has the potential device to improve the students' graduate attributes. Future research should concentrate on a wider range of variables in order to improve learning performance. More researches should be carried out to evaluate the effectiveness of the ePortfolio as a potential tool in other programmes.

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