Digital Portfolios Application: A Tool to Become a Reflective ESL Teacher

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Abstract
The use of portfolios has been promoted in professional development among teachers especially in conducting reflective teaching. However, many teachers found developing portfolios to be time, energy and space consuming with the number of workloads and amount of documentations in school. When doing reflective teaching, teachers also tend to concentrate on their teaching practices and overlook their students’ learning and progress. These issues can be overcome with the use of digital portfolio applications. Digital portfolio applications enable teachers to collaborate with students in creating digital portfolios for different classrooms on iPads, smartphones and laptops. Teachers can create documents like journals or upload materials to be shared with students through the application. Students can add artifacts of different forms to the digital portfolios. With digital portfolio applications, teachers can check students’ assignments and give comments as well. Students can also provide the teachers with feedbacks by writing what they have learned and their comments for lessons. Thus, teachers can create a more comprehensive and systematic portfolio with unlimited storage amount to conduct teaching and learning, document progress and carry out reflective teaching effectively. Such applications also bring convenience as it can be accessed easily with the use of electronic gadgets or devices.

Keywords: Digital Portfolio Application, Student Learning, Reflective Teaching, Teacher Practice

Introduction
A portfolio is a collection of a person’s work over a period of time. It is “a container of documents that provide evidence of someone’s knowledge, skills and/or disposition” (Bird, 1990; Barton & Collins, 1993; Teacher Portfolios, p.1 as cited in Khan & Begum, 2012). Hall (1997 as cited in Khan & Begum, 2012) further defined portfolio as a collection of materials “made by a professional that records and reflects on, key event and processes in that professional’s career” (p. 171). In short, a portfolio is a collection of materials which document a teacher’s professional understanding, skills, experiences and practices.

In the educational context, the use of portfolios has been promoted in professional development among teachers especially in conducting reflective teaching (Borko, Michalec,
Timmons, & Siddle, 1997; Dietz, 1995; Jackson, 1998; Loughran & Corrigan, 1995; Lyons, 1998; Stroble, 1995; Wade & Yarbrough, 1996 as cited in Milman & Kilbane, 2005). Portfolios provide an opportunity and a structure for teachers to record, document and describe their teaching, articulate their professional knowledge and reflect on what, how and why they teach.

According to Bastidas (1996), portfolio is vital in promoting educator's teaching and learning performance as for the purpose to develop and improve oneself constantly. Portfolio promotes teacher's reflection and growth as the written documents are always available for reviews and to serve as the evidence of the teachers’ thinking, reflections, reasoning and actions (Farr Darling, 2001; Mansvelder-Longaroux, Beijaard & Verloop, 2007). It serves as a vehicle in improving instruction through the process of reflective writing and self-scrutiny and evaluates performance within a framework of narration and evidence which could demonstrate the complexity of teaching (Zubizarreta, 1994; Zeichner & Wray, 2001). Murray (1994) also affirmed that portfolio is useful in promoting professional development among teachers as it inspires and directs personal renewal and growth, and allow teachers to control their own personal development in their teaching and learning.

Although portfolios have been characterized in different studies as an ideal reflective tool for professional growth, the research on using portfolio for teachers' professional development is in its infancy. Most research on portfolios has focused on student teachers’ professional development (Morin, 1995; Milman & Kilbane, 2005; Tajul Ashikin, Ruhizan & Rohani, 2015; Weshah, 2010).

Despite this, in schools, many teachers including the ESL teachers found developing portfolios to be time, energy and space consuming with the number of workloads and amount of documentations in school. Time constraints and excessive workloads in schools make the process of constructing portfolio difficult (Milman & Kilbane, 2005; Rodrigues – Farra, 2006). For example, Seldin (1997) highlighted that it generally takes a total of 12 to 15 hours to prepare a portfolio.

Besides, portfolios need to be revised continuously and kept up to date. In Malaysia, it was also reported that teachers were consumed by administrative activities and paperwork and were therefore unable to devote more attention to the classroom, students and their professional growth (Winifred, 2014). A few published empirical studies of portfolios also claim that portfolios appear to foster teacher reflection (Borko, Michalec, Timmons & Siddle, 1997). However, when doing reflection or reflective teaching, teachers tend to concentrate on their teaching practices and overlook their students' learning and progress (Seldin, 1997). ESL teachers who teach different skills such as listening and speaking skills found collecting evidences for such tasks difficult. For instance, teachers need to record the audios or videos in CD-ROMs using a computer or laptop. This then made the process of compiling a portfolio tedious and inconvenient. Nevertheless, these issues can be overcome with the use of digital portfolio applications.

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Digital Portfolio
With the advancement of technologies, portfolios are being developed and displayed in digital format. Such portfolios are often called digital portfolios, multimedia portfolios, electronic portfolios, e-folios, and webfolios (Kilbane & Miman, 2005). According to Balaa, Mansor, Stapa and Zakaria (2012), digital portfolio is also defined as “an electronic portfolio uses electronic technologies, allowing the portfolio developer to collect and organize portfolio artifacts in many media types: audio, video, graphics, and text.” Besides that, Balaa et al. (2012) pointed out that it is a collection of artifacts in the form of electronic and it can serve as “a reflective tool that demonstrates growth over time” for educators. It is also being used as an “administrative tool to manage and organize work” and thus it may “create with different applications” and at the same time educators can control the digital portfolio where “anyone can see or discuss the work”.

When discussing the usage of the digital portfolios, there are three main categories which are the student digital portfolio, teacher digital portfolio and institutional digital portfolio. However, in this concept paper, the researchers’ intention is to discuss the usage of the student and teacher digital portfolio (Balaa et al., 2012).

Student Digital Portfolio
Balaa et al. (2012) highlighted that “a student digital portfolio” can be used to showcase students’ accomplishments. It may be shared with their future employer in the case of a university student or used to document specific learning outcomes in a course. Such artifacts can act as a powerful tool for representation, reflection and revision in a classroom.

Teacher Digital Portfolio
On the other hand, a teacher digital portfolio is an electronic portfolio where “teachers organize and combine their teaching materials for sharing and for use with students and in teaching”. Besides that, an educator may use the digital portfolio for the purpose “for career planning, documenting and demonstrating personal learning and growth...” (Balaa et al., 2012).

Digital Portfolio Applications
A more recent form of digital portfolio being developed is called the digital portfolio applications. Digital portfolio applications come in the form of application software which consists of programs designed to create portfolios. For examples, Seesaw, Easy Portfolios, VoiceThread and more are becoming increasingly popular in classrooms especially across the globe (Nichols, 2016). Similar to the common digital portfolio created on the WordWideWeb (WWW), users can develop their portfolios using the digital portfolio applications (Kilbane & Miman, 2005). However, they are easier to navigate as users create their portfolios using the existing platform and features without having to learn the skills to create a webpage, as compared to the use of e-portfolio, webfolios or digital portfolio (Alias, Alias & Yahaya, 2008).
Digital Portfolio Applications, Reflective Teaching and Professional Development

The use of digital portfolio applications brings the following advantages:

i. **Teacher-student collaboration**
   One of the common features shared by all the digital portfolio applications is that teachers can collaborate with students in creating digital portfolios for different classrooms (American Library Association, 2015; Nichols, 2016; Seesaw Efficacy Study, n.d.). Traditionally, teachers create and compile their portfolios individually. With the amount of workloads and number of classes, the tasks therefore become energy and time consuming (Rodrigues – Farra, 2006). However, with this application, teacher collaborates with students of different classes in compiling students work or teaching materials in different folders.

ii. **Word processing tool**
   Similar to other digital portfolio tools, teachers could use such applications to create documents like journals which serve as both the mean and evidence of reflections (Alias et al., 2008). Teaching materials could be created using this application as well. Teachers can share notes by uploading documents, pictures or videos and even record personal voice to explain learning contents to support learning activities (Tang & Lam, 2012). Figure 1 shows the use of one of the applications, Seesaw to create or upload materials and artifacts.

![Figure 1. Using a digital portfolio application, Seesaw to create and upload materials. Reprinted from Seesaw, Retrieved from http://web.seesaw.me//. Copyright [n.d.] by the Seesaw Inc.](image)

iii. **Information sharing tool**
   This application can also be accessed by students after signing them up. Therefore, teachers could upload materials to be shared with students through the application once they are created (Seesaw Efficacy Study, n.d.). Besides, teachers can work together in developing a portfolio using the applications. As a result, teachers can share information and materials uploaded on the applications (Tang & Lam, 2012). Figure 2
shows how students can be added into the classroom portfolio using QR Code Login through the application, Seesaw.

Figure 2. QR Code Login to add students into the digital portfolio application, Seesaw. Reprinted from Seesaw, Retrieved from http://web.seesaw.me/. Copyright [n.d.] by the Seesaw Inc.

iv. **Online learning community**
Creating a portfolio using the applications with other teachers or students “creates opportunities for discussion, inquiry, feedback and reflection” in a virtual environment (Tang & Lam, 2012, p.79). This enables collaborative learning and information sharing among them. Teachers’ reflective teaching can also be improved.

v. **Collection of artifacts and students work**
Digital portfolio applications like Seesaw allow both teachers and students to add work samples to the portfolios to document progress (Nicolaidou, 2013). These applications accept multiple file types, so students can upload documents, files as well as images or video (Nichols, 2016). 94% of a survey study involving 2000 teachers from both public and private schools within and outside the United States also reported that Seesaw makes it easier to show evidence of students learning (Seesaw Efficacy Study, n.d.). This is because artifacts of different forms can be added to the digital portfolios by taking pictures in the case of a worksheet or other physical item.

vi. **Student feedback**
Students can also write about what they have learned and their comments for lessons and their peers’ work. Such feature helps both the teachers and students to develop themselves. Students’ opinions and feedbacks are valuable for teachers to improve their teaching practices (Seldin, 1997). It was also highlighted in a study done by Nicolaidou (2013), intermediate and advanced students benefited from the peer feedback posted on their e-portfolios.

vii. **Assessment and grading tool**
Teachers can also check students’ assignments and give comments on the portfolio applications. In a survey study conducted by the application developer of Seesaw, 76% of the 2000 research participants revealed that Seesaw saves them time on tasks like
performing assessments and reporting (Seesaw Efficacy Study, n.d.). The following figure presents the feature of the application, Seesaw for teachers to approve students’ work.

![Seesaw Image](image-url)

*Figure 3. The feature of the application, Seesaw for teachers to approve students’ work. Reprinted from Seesaw, Retrieved from http://web.seesaw.me/. Copyright [n.d.] by the Seesaw Inc.*

viii. **Accessibility**

When digital portfolios can be accessed through online easily using computers or laptops with internet connection, digital portfolio applications such as Seesaw is more convenient as they are accessible with the use of more electronic gadgets or devices. For examples, i-Pads, smartphones, computers and laptops (Seesaw Efficacy Study, n.d.).

ix. **Others**

80% of a survey study also revealed that classroom became more organized when Seesaw, one of the digital portfolio applications is used and 92% reported that it increases parents’ engagement and involvement (Seesaw Efficacy Study, n.d.). Such applications commonly can be accessed by parents. In other words, these applications give them a real-time, personalized glimpse into their child’s school day, via their gadgets and devices.

Such applications also provide a large amount of storage system for users to save their documents in different forms. For example, Seesaw provides unlimited storage amount for its users (Seesaw Inc, n.d.). This then helps to solve the problem with storage especially when teachers compile portfolios in printed or hard copy version.

**Challenges in Implementing Digital Portfolio Applications**

Although the use of digital portfolio applications was presented to be useful and beneficial, it may encounter some challenges when it is being implemented in the Malaysian classroom. Malaysian education system faced numerous challenges in the implementation of many
programmes and ICT related initiatives. For instance, the Frog Virtual Learning Environment Project which was introduced by the Ministry of Education in 2011 was not being implemented effectively in schools due to a number of factors (Kaur & Hussein, 2015). The respondents in the study reported that the lack of knowledge and skills as well as facilities and support impeded the implementation of the project (Kaur et al., 2015). These issues might take place as well if digital portfolio applications are introduced in an ESL classroom. To utilize the digital portfolio applications effectively, teachers need to be provided with the relevant knowledge and skills.

Teachers with computer anxiety would also face problems with using digital portfolio applications. According to Fong, Lee, Chang, Zhang, Ngai and Lim (2014), the users who “perceive low computer self-efficacy, it is less likely that they will find the new technology easy to use”. Moreover, many of the digital portfolio applications like Seesaw cannot be accessed without internet connections and electronic gadgets or devices (Seesaw Efficacy Study, n.d.). This presented an issue as some schools in Malaysia especially those in the rural areas are not equipped with electricity or/and technological tools to implement the use of digital portfolio applications.

**Discussions**

With digital portfolio applications, teachers can create more comprehensive portfolios which document both teachers and students work in digital versions systematically. This is because teachers could use such applications to write journals which serve as both the mean and evidence of reflections (Alias et al., 2008). They also enables different kind of documentation to be stored (Nicolaidou, 2013). For examples, video clips demonstrating teacher’s classroom skills or students’ speaking skills could be uploaded to the application. This is more convenient than providing hard copies for every document or student work collected. This thus makes the process of conducting reflective teaching and professional development of teachers more expedient.

Digital portfolio applications also provide platforms for collaborative learning and information sharing to be done among teachers and students (Tang & Lam, 2012). They can be used to share information and materials with students and other audiences such as parents. This is similar to the use of other digital portfolio (website, blogspot) which allows the other users or even public to access the portfolio (Tang & Lam, 2012). Students or parents can provide feedback online as well. The feedbacks provided are useful for teachers to reflect on their practices. As a result, teachers’ reflective teaching can be improved in a collaborative manner.

The applications provide unlimited storage amount as well for teachers to document progress and carry out reflective teaching. As an example, the IOS application like Seesaw enables users to upload and create documents in the application without any limitation set (Seesaw Inc, n.d.). With this, teacher can develop portfolios without having to worry about the space it will take up to create physical portfolios. At the same time, these documents are always available to serve as clear evidences of the teacher’s teaching practices and the students’ learning. So,

Furthermore, the applications are user-friendly as they can be accessed easily with the use of electronic gadget or devices. Teachers and students have access to the application through devices such as i-Pads, smartphones and laptop (Seesaw Efficacy Study, n.d.). A hard copy portfolio maybe difficulty to carry around and a common digital portfolio requires the use of laptop or computer to access. This therefore makes a digital portfolio application a better option to create or develop portfolios.

The use of digital portfolio applications is beneficial as it helps teachers to improve their technological skills. In this information age, the use of technology in teaching and learning is constantly developing in Malaysia classroom. ESL teachers are required to have wider knowledge in the usage of teaching and learning using ICT. According to Balaa, Mansorb, Stapac and Zakaria (2012) as cited in Muhammad Kamarul Kabilan, it was highlighted that “ESL teachers to master ICT knowledge and adapt it in their teaching to ensure Malaysia can become part of developed countries by the year 2020.”

Conclusion
In conclusion, the digital portfolio applications could be used in conducting reflective teaching among ESL teachers as it helps to create more comprehensive and systematic portfolios (students’ feedback, work, journals, etc). Reflective teaching can be done as a community with the help of students or/and other teachers who use the applications. The digital portfolio application is also helpful in conducting professional development among ESL teachers as it improves teachers’ technology and instructional skills in classrooms. It is important for the ESL teachers regardless their age or expertise, they should always keep themselves up to the date pertaining the usage of ICT in their teaching and learning in this information age. It is also proposed that teacher’ skills as a reflective practitioner will be improved with the use of digital portfolio applications. Such applications also help to overcome technical problems with storage and accessibility when developing hardcopy portfolios.

References


