Online Teaching Portfolio as a Catalyst for Professional Development

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Abstract

In today's world that is constantly changing with new technologies, teachers are faced with significant challenges which they can meet by engaging in optimal professional development. As an effective tool to deepen teachers' understanding of their role and prospects, teaching portfolios have been traditionally used in teacher education and development. Made possible by recent technological innovations, online teaching portfolios have naturally emerged as a value-added form of professional development to be employed by teachers who are willing to respond to the constant changes in our digital age. The present paper aims to analyse the role, potential and advantages of online teaching portfolios within the context of teacher professional development in view of current research and literature, as compared to traditional paper-based teaching portfolios. Research findings suggest that the advantages and positive effects of utilizing online teaching portfolios on professional development outweigh the drawbacks and difficulties encountered by teachers. Online teaching portfolios not only spur reflection, creativity and collaboration among teachers, but also yield such complementary benefits as the enhancement of their social and linguistic competences as well as ICT skills. The employment of online teaching portfolios perfectly captures the very nature of self-directed professional learning and provides a rationale for undertaking other forms of professional development. It is anticipated that the online teaching portfolio, if implemented within the Malaysian educational context, will catalyse the personal and professional growth of both in- service and pre-service teachers through its capacity to foster and maintain continuous development and reflection on competences and accomplishments.
Keywords: Online Teaching Portfolio, Professional Development, Teacher Education

Introduction

In today's world that is constantly changing with new technologies, teachers are faced with significant challenges which they can meet by engaging in optimal professional development. As an effective tool to deepen teachers' understanding of their role and prospects, teaching portfolios have been traditionally used in teacher education and development. Made possible

by recent technological innovations, online teaching portfolios have naturally emerged as a value-added form of professional development to be employed by teachers who are willing to respond to the constant changes in our digital age. The present paper aims to analyse the role, potential and advantages of online teaching portfolios within the context of teacher professional development in view of current research and literature, as compared to traditional paper-based teaching portfolios. Before discussing teaching portfolios and online teaching portfolios, we will first have a look at what professional development is and how teachers can pursue it effectively.

What is Professional Development?
Professional development can be broadly defined as the process of learning new knowledge or skills with the purpose of improving one's performance in a profession. Although the term "professional development" is often associated with formal activities like attending conferences, workshops and mentoring, it also includes informal experiences, such as having discussions in a collegial atmosphere, observing fellow workers, reading specialist publications and researching subjects of interest on one's own initiative.

In the case of teachers, professional development "is the professional growth a teacher achieves as a result of gaining increased experience and examining his or her teaching systematically" (Gatthorn, 1995, p. 41). It is considered "a long-term process that includes regular opportunities and experiences planned systematically to promote growth and development in the profession" (Villegas-Reimers, 2003, p.12).

In order for teacher professional development to be effective, it should, above all, be an ongoing process, encourage individual reflection, be embedded in teachers' daily work, and promote collaboration and interaction between teachers (Abdal-Haqq, 1996). Similarly, Diaz-Maggioli (2003) asserts that teacher professional development is "not a one-shot, one-size-fits-all event, but rather an evolving process of professional self-disclosure, reflection, and growth that yields the best results when sustained over time in communities of practice and when focused on job-embedded responsibilities" (p.1).

Professional Development Approaches
Approaches to professional development can be roughly divided into two types: collaborative and individual. Peer observation, team teaching, mentoring and coaching are examples of collaborative procedures, whereas action research, case studies, and videotaping are conducted individually or sometimes as joint endeavours. Yet, there are some models of professional development that are essentially individual, but their resulting products become more efficacious in terms of professional development when they are shared with colleagues or when those models are undertaken collaboratively. Here belong, inter alia, self-observation, journal keeping and teaching portfolio compilation (Bailey, Curtis, Nunan, & Fan, 2001).
Notably, the development of a teaching portfolio is the perfect companion to collaborative forms of professional development, particularly mentoring, peer observation and team teaching. What makes the teaching portfolio construction particularly remarkable is that it involves recording or documenting various professional development activities undertaken by a teacher.

What is a Teaching Portfolio?
The word "portfolio" is composed of two words "*portare*" (to carry) and "*foglio*" (sheet of paper), and literally means "a cover or case for carrying sheets of paper". Originally, a portfolio is "[a] representative collection of one's work […] fashioned for a particular objective and carried from place to place for inspection or exhibition" (Wiggins & McTighe 2005, p. 347).

Well known in the arts, portfolios have long been used by architects, designers, photographers, writers and artists to collect sketches, drafts and finished works. They represent the artistic creative process and document the artistic development, and are intended to showcase the artist's style and versatility to potential employers or clients.

Since the end of the 1980s, portfolios have gained popularity throughout the education system: first, as a means of monitoring and assessing students' work as *student portfolios*, particularly in mathematics and language instruction; and then increasingly in teacher education and professional development as *teaching portfolios*.

Fundamentally, a teaching portfolio is similar to an artist's portfolio. It is a compilation of miscellaneous items providing information on various aspects of a teacher's work. It documents the teacher's performance and provides a basis for reflection and review (Richards & Farrell, 2005).

Basically, a teaching portfolio "represents who you are, what you do, why you do it, where you have been, where you are, where you want to go, and how you plan on getting there" (Evans, 1995, p. 11). It "tells the story of a teacher's efforts, skills, abilities, achievements, and contributions to his/her colleagues, institution, academic discipline or community" (Brown & Woolfe-Quintero, 1997, p. 28)

Purpose and Benefits of Constructing a Teaching Portfolio
There is a variety of reasons for which teachers construct portfolios. Student teachers develop portfolios to showcase their learning achievements within the framework of teacher education programmes. These portfolios may subsequently be presented during job interviews. As for practising teachers, they compile portfolios to display their teaching excellence or as part of their professional development.

Constructing a teaching portfolio has many benefits. To begin with, it shows the teachers' attitude towards their profession and displays how creative, resourceful and effective they are. It presents a more impressive image of the teacher's strong points and achievements than a curriculum vitae. Secondly, it induces the teachers to undertake self-assessments more thoroughly and to reflect on their jobs from different perspectives. During the portfolio review process, the teachers can decide on priorities, objectives and directions in which they can further develop and improve themselves. Thirdly, it affords an opportunity for fruitful collaboration with peer teachers. For instance, compiling a teaching portfolio can serve as a complementary part of the peer coaching process. Furthermore, the incorporation of teaching portfolio development into the mentoring process can be highly beneficial for novice teachers. Lastly, it can prove particularly useful for two teachers involved in team teaching to

construct a joint teaching portfolio for a class they work with (Richards & Farrell, 2005; Zepeda, 2012).

Teaching Portfolio: Mirror and Map

The major benefits of assembling a teaching portfolio can be summarized by two metaphors: the *mirror* and the *map* (Richards & Farrell, 2005).

- The mirror metaphor represents the reflective essence of a teaching portfolio, which enables teachers to look at their progress in process of time. The teaching portfolio is illustrative of the teachers' scope of abilities and activities. As a mirror, the teaching portfolio gives teachers the opportunity to reflect on what they have attained professionally.
- The map metaphor represents the idea of drawing up a plan and defining objectives. Following the review of accumulated teaching artefacts, the teachers can define short-term and long-term objectives. The teaching portfolio is likened to a map in the sense that it helps to decide "where one has arrived in one's development as a teacher and where one would like to go next" (Richards & Farrell, 2005, p. 100-101).

Thus, a teaching portfolio acts as a mirror into your own teaching and a map for your professional development.

Teaching Portfolio as Assessment Tool

From this perspective, teaching portfolio serves as a popular means of assessing the competences of both pre-service and in-service teachers. In fact, teaching portfolios can be used as an assessment tool for the following three purposes:

- for summative assessment to evaluate teaching performance at regular intervals;
- for formative assessment to improve teaching practice on an ongoing basis; and
- for self-assessment to encourage teachers to monitor their own learning and to reflect on it.

Core Elements of a Teaching Portfolio

Although the content and form of a teaching portfolio may differ according to its purpose, there are essentially three core elements every teaching portfolio should include (Rodriguez-Farrar, 2006; Spanneberg, 2009):

- Teaching philosophy
- Evidence
- Reflections on evidence

Teaching philosophy performs an introductory function and serves as a brief statement of one's approach to teaching as well as a declaration of one's objectives and strategies for future.

Apart from teaching artefacts like lesson plans and student work samples, *evidence* typically encompasses educational qualifications, proofs of ongoing professional development and formal evaluations.

Reflections on evidence provide commentaries in order to put in context the material presented in the teaching portfolio. They include accounts of major accomplishments achieved and areas for improvement in one's teaching.

Teaching Portfolio: Process and Product

Assembling a teaching portfolio is not quick and takes time. It is to be considered as "an ongoing, long-term endeavor, with new features being added as needed and when they become available" (Richards & Farrell, 2005, p. 102).

A teaching portfolio should not be regarded as a simple compilation of documents, but rather as the result of a process of involvement, engagement and reflection (Loughran & Russell, 2005). Thus, there is both a process and a product.

As Barret (2000a) points out, a teaching portfolio "is not a haphazard collection of artefacts […] but rather a reflective tool that demonstrates growth over time".

From Paper to the Web: Online Teaching Portfolio

While traditional paper-based teaching portfolios are well established in teacher education and development, online teaching portfolios have naturally emerged as a value-added form of professional development, which was made possible by recent technological advancements.

Online teaching portfolios, also known as web-based teaching portfolios, digital teaching portfolios or teaching e-portfolios, resemble paper-based portfolios in many ways, primarily in terms of goals

and contents. However, the online teaching portfolios provide an entire range of new possibilities and unique benefits, which are not offered by conventional paper-based formats.

Key Characteristics of Online Teaching Portfolios

One of the key features of online teaching portfolios, which distinguish them from paper-based portfolios, is increased accessibility. Publishing a teaching portfolio on the Web makes it more accessible to peers, students, potential employers and wide audiences. At the same time, teachers can easily update their portfolios virtually everywhere at their convenience.

Another major benefit of working with online teaching portfolios is that professional materials can be presented in audio and video formats, apart from text and graphics. Also, hyperlinks can make it possible to access additional resources. For example, teachers can include video footages of their lessons. These enhanced media possibilities provide a richer and more authentic picture of teachers than traditional paper-based portfolios, enabling teachers to demonstrate their creativity and resourcefulness in different ways. In particular, teachers seeking employment can make use of online teaching portfolios to increase their marketability in a considerable manner.

An online teaching portfolio can be used as a channel of communication with colleagues, students, parents, and administrators. Teachers can easily share and discuss their ideas and

experiences with peers. In addition, teachers can use the blog part of their portfolios to interact with their students outside the classroom and to post important announcements and classroom updates.

An online teaching portfolio can be explored by utilizing non-linear relationships between its components. In contrast to linear format of paper-based portfolios, online teaching portfolios can be reviewed in different ways with the help of hyperlinks that ensure navigation between various portfolio sections as well as browsing relevant information sources in the Internet.

Last but not least, the unique characteristics of online teaching portfolios not only improve the development and review processes, but also significantly reduce the need for paper and space.

Online Teaching Portfolio Development

The process of developing an online teaching portfolio would ideally consist of five steps accompanied by the incorporation of computer software and audio-visual multimedia (Barret, 2000a):

1. Deciding on the purpose and audience, which will determine the context and goals;
2. Planning the collection of miscellaneous materials, which will eventually make up the content;
3. Selecting the items that represent teacher accomplishments and learner achievements, which will be rationalized by pertinent reflections;
4. Evaluating the selected artefacts for overall coherence and conformity with the context and goals;
5. Presenting the completed teaching portfolio on the Web.

It should be noted that the process of developing an online teaching portfolio is reflective and recurrent in its nature as it necessitates constant review and update in the course of ongoing professional development.

Online teaching portfolios can be built from scratch for free using several website development platforms that are available on the Internet. To name a few, Google Sites, WordPress, Blogger and Weebly are commonly used by teachers to develop and publish their teaching portfolios on the Web. Although these services were not originally designed for portfolios, they nonetheless can be adapted to suit the needs of an online teaching portfolio.

Research Evidence on Advantages and Challenges of Using Online Teaching Portfolios

The use of online teaching portfolios is becoming increasingly popular in teacher education and development, especially in the US, Australia, and Europe. The growing interest in online teaching portfolios can be rationalized by the findings of empirical studies, which reported the generally positive impact of engagement with online teaching portfolios on teachers' professional development.

In this section, we would like to overview advantages and disadvantages of using online teaching portfolio based on the results of some recent studies dealing with the employment of online teaching portfolios in the processes of education and development of teachers.

Research Evidence on Advantages of Using Online Teaching Portfolios
First, let us have a look at some research evidence on the advantages of using online teaching portfolios in the education of pre-service teachers.

Several studies suggest that the compilation of online teaching portfolios raises teacher candidates' appreciation of their pedagogical skills and their practical knowledge of modern technology (McKinney, 1998; Milman, 1999; Barrett, 2000b).

In their study, Peters, Chevrier, LeBlanc, Fortin, & Malette (2006) found that pre-service teachers were convinced that the online teaching portfolio construction was conducive to the development of self-respect and self-assessment as well as the enhancement of organisational and reflective skills.

The study by Lin (2008) indicated that teacher candidates felt that the use of an online teaching portfolio encouraged reflection on their teaching styles as well as strong and weak points, making them look at their own learning experiences from a different perspective.

Online teaching portfolios provided a stimulating environment for pre-service teachers to communicate and to collaborate with one another, to expand their knowledge and skills by capitalizing on each other's ideas and evaluations (Lin, 2008; Maher & Gerbic, 2009).

The use of an online teaching portfolio provided teacher candidates "a space to construct a reflective narrative around their learning processes". In addition, they had the opportunity to scrutinize any part of their teaching portfolios at any stage of their development process (Ehiyazaryan-White, 2012, p. 184).

Compiling an online teaching portfolio helped teacher candidates build media literacy skills and afforded them an opportunity to showcase creativity (Karpa, Kempf, & Bosse, 2013).

While most research focuses on pre-service teachers' professional development, some studies focus on the impact of online teaching portfolios on the professional development of in-service teachers.

Notably, the study conducted by Milman & Kilbane (2005) investigated the impact of online teaching portfolios on the professional development of in-service teachers. In this study teachers participated in a course, in which they were instructed on developing online teaching portfolios and were subsequently required to construct their own online teaching portfolios. This study's findings can be summarized as follows:

- As a result of online teaching portfolio construction, the teachers could learn more ways of applying computer technology.
- As part of the process of online teaching portfolio development, teachers were required to learn new skills, particularly those needed for the application of computer technology. This was very much like learning a new language, which aroused in teachers more empathy towards their students.

- The construction of online teaching portfolios encouraged reflection in teachers, which led to a better understanding of the teaching profession.
- The engagement with online teaching portfolios stimulated teachers to pursue professional development in three distinct ways. Firstly, the teachers felt motivated to seek out more knowledge and improve their skills in order to become technology-savvy. Secondly, the teachers felt inspired to continue updating their online teaching portfolios, which served as the beginning of ongoing professional development. Finally, after going through the process of developing online teaching portfolios, teachers found themselves in a position to advocate the use of online teaching portfolios in schools (Milman & Kilbane, 2005).

Research Evidence on Advantages of Using Online Teaching Portfolios in Malaysia
In our review of the research literature, we have found two studies that examined the use of online teaching portfolios within the Malaysian educational context: one by Kabilan & Khan (2012) and another by Bala, Mansor, Stapa, & Zakaria (2012).

In the study conducted by Kabilan & Khan (2012), fifty five student teachers in the TESOL programme at the Universiti Sains Malaysia constructed an online teaching portfolio.

The findings of the study indicate that online portfolios functioned as a "monitoring tool" that enabled pre-service teachers to appreciate the importance of the learning process and to discover their own strong and weak points. The study concluded that the following teaching competences were developed as a result of online teaching portfolio compilation (Kabilan & Khan, 2012):

- clear appreciation of teaching effectiveness;
- greater awareness of the need for teaching activities;
- enhancement of language skills;
- improvement of content knowledge;
- acquisition of ICT skills;
- change of mental attitudes.

In the study by Bala et al. (2012), twenty English language teachers from different primary and secondary schools in Johor Bahru were involved in the compilation of an online teaching portfolio over the course of six weeks after receiving training.

The findings of the study suggest that the teachers attributed their improvement in professional development to their engagement with online teaching portfolios. They specifically pointed out that the construction of online teaching portfolios positively influenced their social competences and language skills. In addition, online teaching portfolios provided a platform for teachers to develop their ICT skills, competences and creativity. Having become more confident in their own use of technology, the teachers became motivated to apply technology to a greater extent in their classrooms (Bala et al., 2012).

Research Evidence on Challenges of Using Online Teaching Portfolios
Although online teaching portfolios have many benefits, they are not without challenges. Perhaps the greatest concern with both paper-based and online teaching portfolio is connected with time and attention required for completion of the portfolio. Especially in-service teachers do not always find time to engage in portfolio development because they are busy with existing workload and have many responsibilities (Wray, 2007; Spanneberg, 2009; Daunert & Price, 2014).

Apart from being time-consuming, teaching portfolio compilation could be regarded as fairly demanding because it requires reflective writing skills. When involved in portfolio compilation, teachers tend to misinterpret reflection as reporting. Consequently, teachers often give a detailed account of how they introduced a certain concept instead of critically reflecting on a lesson (Firssova, 2006; Spanneberg, 2009).

Some teachers experience confusion over the purpose of compiling a teaching portfolio and uncertainty over its content. Particularly, pre-service teachers can feel discouraged when they cannot see the reasons for which portfolios are needed and what requirements are set in terms of content and format, what the assessment criteria are, and how they can benefit from this experience at an early stage of their teaching careers (Wray, 2007; Lin, 2008).

Just like with any new technology, one significant drawback with online teaching portfolios is the limitation to teachers who are illiterate in technology. Additionally, teachers need to have the right equipment and software in order to work on online teaching portfolios (Wray, 2007; Akçil & Arap, 2009).

Finally, there might be some copyright and privacy issues as well. Publishing original works, ideas, and thoughts via the Internet might enable plagiarism. Similarly, providing authentic examples of student work can pose legal issues (Lorenzo & Ittelson, 2005).

Conclusion and Implications
Our review of recent research and literature has revealed that the advantages and positive effects of utilizing online teaching portfolios on professional development greatly outweigh the drawbacks and difficulties encountered by teachers. Although their construction may prove fairly demanding and time-consuming, online teaching portfolios help teachers gain a greater appreciation of the teaching profession, develop and enhance their reflective and digital literacy skills.

While preserving all the benefits of established paper-based teaching portfolios, online teaching portfolios have become prominent in teacher education and professional development owing to a range of highly advantageous features made possible by recent technological advances. Online teaching portfolios afford teachers new opportunities to continually evaluate and enhance their teaching quality and practices through self-assessment, exchange of ideas and experiences with peers as well as interaction with students outside the classroom. With increased accessibility and enhanced media possibilities, online teaching portfolios provide a rich and authentic picture of teachers, simultaneously giving them the means to demonstrate their creativity and resourcefulness in different ways as well as to improve their marketability.

Online teaching portfolios not only spur reflection, creativity and collaboration among teachers, but also yield such complementary benefits as the enhancement of teachers' social and linguistic competences as well as ICT skills. As a result, teachers can be encouraged to promote creativity and reflective thinking, and to extend the application of technology in their classrooms.

Compiling an online teaching portfolio embodies the essence of effective teacher professional development as an ongoing, reflective, job-embedded and collaborative process of professional growth. It perfectly complements other models of professional development, especially mentoring, peer observation and team teaching.

Online teaching portfolios capture the very nature of self-directed learning within the context of professional development by serving as an instrument for controlling one's own professional learning, which enables teachers "to become the architects of their own professional development" (Wolf, 1996, p. 37). Acting as a catalyst for pursuing personal and professional development on a continuing basis, online teaching portfolios can potentially prove a valuable tool for teachers' lifelong learning.

It is anticipated that the online teaching portfolio, if implemented within the Malaysian educational context, will catalyse the personal and professional growth of both in-service and pre-service teachers through its capacity to foster and maintain continuous development and reflection on competences and accomplishments, providing a rationale for undertaking other forms of professional development.

For a successful implementation of online teaching portfolios, aside from necessity for training in modern technology and reflective writing, it is vital that teachers clearly understand the purpose and benefits of teaching portfolios prior to investing time and efforts into the development of their own portfolios.

All in all, it is crucial to bear in mind that constructing an online teaching portfolio is not an end in itself, but rather a means to promote effective teaching and successful learning.

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