

## Developing Electronic Teaching Portfolios: A Way to Success for Preservice Teachers<sup>1</sup> (建立电子教学档案, 促进对外汉语教育)

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**Abstract:** This pilot study examines the role of the electronic teaching portfolio application in a Chinese language teacher education program content course. As part of the course requirements for *Supervised Teaching of Chinese*, ten graduate students developed electronic teaching portfolios via the open-source tool *WordPress*. In reporting the process and the product, we show that preservice teachers, while developing their portfolios, were directed to reflect on and think critically about learning objectives, thereby building competence and skills by the completion of the project. More precisely, these student teachers gained the following: (i) a better understanding of requirements for Chinese-language teachers in the real world; (ii) a greater commitment to a teaching career in the K-12 setting; (iii) improvement of high-level critical and reflective thinking; (iv) an increased sense of responsibility; (v) stronger English writing skills, and (vii) enhanced appreciation of professionalism. The results of this study show that having preservice teachers create e-portfolios encouraged and even empowered them to become more qualified teaching candidates. The effects of the skills gained as a result of this program will be discussed along with suggestions for enhancing Chinese-language teacher education.

**摘要:** 本文探讨电子教学档案在对外汉语教育课程中的应用。十名职前对外汉语教师借助 WordPress 创建教学档案, 其制作过程及成果显示, 建立个人档案是职前教师学习和自我提升的重要途径。具体而言, 他们的收获如下: (一) 对对外汉语教师的现实要求有了更好的理解; (二) 对 K-12 教学事业有了更大的承诺; (三) 提高了批判性思维能力; (四) 增强了教师责任感; (五) 提高了英文写作能力; (六) 提升了专业素养。研究表明, 要求职前教师建立电子档案可以有效地

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帮助他们成为合格的对外汉语教育工作者。基于上述结论，我们就对外汉语教育如何应用电子档案提出了具体建议。

**Key words:** e-portfolios, Chinese language teacher education

**关键词:** 电子教学档案, 对外汉语教育

## 1. Introduction

American Council on the Teaching of Foreign Languages has proposed Program Standards for the preparation of foreign language teachers (ACTFL, 2002).<sup>2</sup> These standards mandate that preservice teachers be knowledgeable and skillful in six areas. Specifically, preservice teachers must, first and foremost, know the target language, linguistic structures, and the similarities and differences between the target language and other languages. In addition, they must be familiar with the cultures and the literature of the language taught, and understand cross-disciplinary concepts. Moreover, they should be familiar with language acquisition theories and instructional practices. They should also be capable of integrating standards into curriculum design and classroom instruction. They should be familiar with various methods for assessing language proficiency and understanding of cultures. Finally, the future teachers should engage in professional development and serve as advocates for the value of foreign language learning.

In order for preservice teachers to attain the knowledge, skills, and dispositions as described in the above standards, teacher preparation programs must not only include the required components in their curriculum, but more importantly, are able to demonstrate that their students have achieved these goals. For those involved in teacher training on the front end, the question is how to assess preservice teachers. In other words, what are the authentic and effective methods that assure us that our teacher candidates achieve the ideal objectives by the end of their training? One valuable tool that has been utilized in teacher education is having students create teaching portfolios (e.g., Jarvinen and Kohonen, 1995; Shulman, 1998; Martin-Kniep, 1999; Bullock and Hawk, 2001; Fasanella, 2002; Kilbane and Milman, 2003, McColgan and Blackwood, 2009; Struyven et al., 2014; Ogan-Bekiroglu, 2014; Kim and Yazdian, 2014; Demirel and Duman, 2015). A teaching portfolio, as defined by Armstrong et al. (2005) “includes evidence a teacher gathers to document what he or she has accomplished with a given group of learners over a period of time...” (pp. 416-417).

With advanced technology involving a variety of multimedia, it is now easier and effective for students to produce dynamic and engaging online portfolios by building individual classroom websites. These can contain a variety of material, even including videos of the students’ teaching demonstration. This kind of electronic portfolios

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<sup>2</sup> The standards were first endorsed by the National Council for Accreditation of Teacher Education, and in 2013 approved by the Council for Accreditation of Educator Preparation State Partnerships and Content Areas Committee.

(henceforth, e-portfolios) can be accessed to all stakeholders involved in teacher education, including preservice teachers, teacher-trainers, mentors, and potential employers. This paper examines whether the technology-enhanced teaching portfolio application will enable preservice teachers to advance academically and professionally. The following sections provide a general review of teaching portfolios and describe the methodology of the present pilot study. The findings of the study will be presented along with suggestions proposed for its application in Chinese-language teacher education.

## 2. Teaching Portfolios: a Literature Review

The concept of using portfolios in teaching and teacher education dates back to the 1980s, and it has now become common in teacher education programs in the US (e.g., Worf, 1996; Worf and Dietz, 1998; Zeichner and Wray, 2000; Zeichner and Wray, 2001; Foote and Vermette, 2013). According to Bal (2012), a portfolio is a collection of a learner's work over a specific period, showcasing his or her knowledge and development through different stages of education and training. The items in the compilation reveal the learner's development and achievements, as well as experience, reflections, and self-evaluation represented either by his or her own writings or by artifacts. Portfolio applications offer the potential to document each student's journey of learning thereby serving as an effective tool for individual learning (e.g., Imhof and Picard, 2009; Gibson and Barrett, 2002). The core of the portfolio is the systematic evaluation of the learner's performance and work as argued by Moya and O'Malley (1994). Barrett (2011) emphasized that the real value of portfolios is its capability to promote students' reflection and learning.

Portfolios used to be collections of work assembled in "boxes" or "three-ring binders," but a new container emerged with the advent of information technology, resulting in what is known as e-portfolios, "stored in digital form" (Gibson and Barrett, 2002, p. 556).<sup>3</sup> According to Gibson and Barrett (2002), e-portfolios can be created by using generic and/or customized tools such as HTML editors, multimedia authoring software, programming, and databases. Regardless of the format, paper-based or web-based, portfolios have become an established practice to achieve different purposes. Bal (2012) claimed that portfolios serve as "an essential evaluation tool revealing descriptive, formative and summative information about students and their products, as well as suggesting the information about students' strengths and weaknesses in line with the organization of the education" (p. 88). McColgan and Blackwood (2009) pointed out that portfolios fulfill two functions: encouraging students to engage in producing evidence of their competency and personal development, and providing employers with a tool to evaluate their staffs. Tucker et al. (2002) suggested that portfolios have a dual-goal: evaluating and developing professionalism with the two complementing each other. Wolf and Dietz (1998), however, proposed a three-fold model based on the authorship of the

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<sup>3</sup> Kilbane and Milman (2003) noted that terms such as "digital portfolios," "multimedia portfolios," "e-portfolios," "webfolios," "electronically-augmented portfolios," all contain the same basic content as traditional teaching portfolios, but presented in digital format.

portfolio, and the roles that the portfolio can play.<sup>4</sup> That is, a *learning portfolio* created by preservice teachers for self-assessment; an *assessment portfolio* developed by in-service teachers for their professional growth; and an *employment portfolio* presented by individuals to prospective employers for career development. Therefore, the function of portfolio can span a student teacher's entire academic career from the initial training to the final job search.

There has been a myriad of research on portfolios and e-portfolios since the concept was incorporated into teacher education. A review of the related literature shows various studies on different aspects. Many explored their benefits, including student learning (e.g., Zou, 2003), quality teaching (e.g., Kim and Yazdian, 2014), or assessment (e.g., Fasanella, 2002; Price, 2013). Several specifically looked at training teacher candidates in separate disciplines, such as mathematics (e.g., BAL, 2012), physics (e.g., Ogan-Bekiroglu, 2014), ESL (e.g., Kim and Yazdian, 2014), and foreign language learning (e.g., Demirel and Duman, 2015). Certain research examined their use in the K-12 education (e.g., Kim and Yazdian, 2014), while others focused on higher education (e.g., McColgan and Blackwood, 2009). There are also studies about development of electronic portfolios for Distance English Language Teachers (e.g., Kecik et al, 2012). More relevant to this paper is the research that examined preservice teachers' perceptions, as summarized below.

Cakir and Balcikanli's (2012) is a study of the perspectives of English Language Teaching student teachers and teacher trainers on the use of the portfolio in preservice language teacher education. The results suggested that both student teachers and teacher trainers found that portfolios were beneficial in reflection, self-assessment and awareness. Based on their findings, the authors proposed integrating the European Portfolio for Student Teachers of Languages as part of teacher education program, and further converting it into an online format to make it more convenient for the student teachers. In the same vein, Kecik et al. (2012) conducted a survey of the needs of preservice teachers and determined whether the portfolios satisfied the needs in distance teaching practice courses. Comparing and analyzing the quantitative and qualitative data from university supervisors, teacher candidates, and cooperating teachers on the feasibility of the e-portfolio application, they found that all the three groups agreed about the needs of preservice teachers. While there were some minor variances in the perspectives of each group, they found that e-portfolio application can meet the majority of the planning, teaching, and reflection needs in the teaching process. Ogan-Bekiroglu (2014) measured preservice teachers' reflections using a targeted qualitative research, i.e., participants' portfolios and interviews. The findings showed that most of the preservice teachers gained expertise in reflecting upon their teaching skills. In another study, Bal (2012) showed that primary mathematics teacher candidates enhanced their thinking and researching skills and improved their cognitive and affective processes. The study also showed that students who are academically more successful also gained more effective research skills.

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<sup>4</sup> Bullock and Hawk (2001) distinguished three types of portfolios: Process, Produce, and Showcase. Regarding the purposes of portfolios, they include five sub-types: portfolios for preservice teachers; for obtaining a job; for continuing licensure; for alternative evaluation; and for master teachers.

While studies on the portfolio abound in the literature, suggesting positive and beneficial effects on preservice teachers' skill development, scant efforts have been made to uncover the effects of utilizing portfolios in a Chinese-language teacher preparation program in order to evaluate students' academic and personal development.<sup>5</sup> As a result, this study describes a teacher educator's efforts to integrate an e-portfolio project in a graduate-level teacher curriculum with the goal of gaining insights for improving Chinese-language teacher education.

The major research question of this study is: whether the e-portfolio development serves as a learning tool as well as a means of assessment for Chinese teacher education. In addition, it explores the specific question whether applying the technology to portfolio construction adds value. The research questions are outlined below:

1. Does using e-portfolio contribute to preservice Chinese teachers' skill development?
  - 1.1 Do preservice teachers develop their teaching philosophy through using e-portfolio?
  - 1.2 Do preservice teachers develop a professional resume through using e-portfolio?
  - 1.3 Do preservice teachers develop quality lesson plans through using e-portfolio?
  - 1.4 Do preservice teachers develop a professional e-portfolio?
2. Does technology add more value to the e-portfolio construction?

The author hypothesizes that building e-portfolios is a dynamic learning process towards the learning objectives, while the end product provides evidence for evaluating student learning. As preservice teachers develop the content of their portfolios, they learn to formulate teaching beliefs, design instructional activities, create lesson plans, and prepare teaching demonstration. All of these contribute to the cultivation of competence, knowledge, critical thinking, reflections, experience, skills, and professionalism required for a qualified Chinese-language teacher (ACTFL, 2002; Everson, 2009).

### 3. Methodology

**Participants** The ten graduate students participating in the current study were enrolled in the teaching track of Asian Studies graduate program, who were undergoing training to become Chinese teachers in the K-12 setting in the US. Three students were at their 4<sup>th</sup> semester, ready to graduate by the end of that semester, while other seven students had been studying for either one year or one year and a half in the program. All except one had completed *Methods of Teaching Chinese* before they undertook the project. All of them had some experience tutoring or teaching American students as a guest teacher or a student teacher. Some were working part-time in private schools or weekend heritage Chinese schools. It is worth mentioning that of the ten students, six had

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<sup>5</sup> Teachers College at Columbia University required their students of the Teaching Chinese to Speakers of Other Languages Certificate Program to produce e-portfolios, <http://www.tc.columbia.edu/arts-and-humanities/tcsol-certificate/resources/e-portfolios/>. However, no publication was found on this topic.

either completed one-year study in the graduate program Teaching Chinese to Speakers of Other Languages at a Chinese university in China or had already earned an MA degree from that program. Demographically, one was from Taiwan, nine from mainland China, with two male students and eight female students, ranging from mid 20s to high 30s in age.

**Context** All the participants registered in *Supervised Teaching of Chinese*. This was a graduate course specially designed to help preservice teachers acquire skills and techniques required to teach Chinese language and culture. Foreign language education standards (ACTFL, 2006) were re-visited and major principles of second language acquisition (e.g., Lee and VanPatten, 2003; Lightbown and Spada, 2013) were re-examined in the class. However, the focus of the course was to cultivate preservice teachers' ability to apply standards to teaching, gaining a better understanding of the requirements, and developing teaching skills. To that end, students were required to explore teaching of the Chinese language in a real-world setting; this required that they teach at a self-selected school for at least a month or co-teach 4 to 6 classes under the supervision of the instructor in conjunction with their mentors in the school. For each class, students needed to hand in a lesson plan, including the objectives to be achieved, the materials to be taught, the methods or techniques to be applied, and the activities to be used. Apart from that, students were required to observe classes and to compile five journals that recorded their experiences. Each journal had to include their reflections about the lesson plans of the instructor, teaching methods, student reactions, student performance, and any other relevant issues if observed. Participants also needed to design five teaching activities for teaching some aspect of the Chinese language or culture. Finally, students needed to submit a paper reflecting on what they learned throughout the course. All the above, i.e., the teaching, journal writing, activities designing, and reflective paper, were purposely assigned to prepare the preservice teachers to build their own portfolios. Classroom discussions were planned throughout the course. Taking teaching philosophy, for example, students were first shown a sample, which was then discussed and analyzed in the classroom to identify important elements for a good teaching statement. Students also watched videos of teaching demonstrations to learn to develop a lesson plan, teaching activity or task with a focus on the strengths and weaknesses of each class. Throughout the project, assistance and support was available from the instructor or the mentors of the school where students were teaching.

**Implementation of e-portfolios** To determine the role that the e-portfolio application plays in preservice teachers' learning journey, each preservice teacher was assigned to create an online profile, which was to contain a minimum of the following: resume, introduction to oneself, teaching philosophy, lesson plans, instructional activities, video-taped teaching demonstrations, and student work. The e-portfolio creation was a required project assigned on the first day of the course *Supervised Teaching of Chinese*. The completed portfolios were evaluated based on a rubric developed by the author, also the instructor of the course, as presented in Appendix.

**Technology** What is the best tool that will enable preservice teachers to create their portfolio and make it digitally accessible? <sup>6</sup> After consultation with experts from the Teaching, Learning and Technology Center (TLTC) of the University where the author teaches, *WordPress.com* (henceforth *WordPress*), the most popular online publishing platform was selected. <sup>7</sup> Powering 27% of the internet, *WordPress* provides the ability to build a website free of charge. <sup>8</sup> The second rationale for choosing *WordPress* is its flexibility, enabling one to build a blog, a full website, or a combo, or a portfolio, or a business site. The third reason was that *WordPress* offers professional-looking templates but allows for individual customization. The fourth reason for selecting the tool to host the preservice teachers' portfolios is that the platform provides universal access to any interested party on any possible devices, including mobile phones.

While *WordPress* "is the easiest place to get started," as boasted by *WordPress.com*, it still presents difficulty to new users who have little technical knowledge or skills (e.g., Avila et al, 2016). Aware of the challenges to get started with the system, and the complexity to build an e-portfolio (e.g., Kilbane and Milman, 2003), we invited a senior instructional designer from the TLTC to the class to lecture on the fundamentals of developing a website as well as using *WordPress*. Not only did the instructional designer show the class how to create a website from scratch, she also offered advice on practical issues such as how to handle online media files. This training was arranged in the middle of the semester when preservice teachers had begun to assemble the content materials. Students had three weeks to focus on the development before submitting their first draft, i.e., a link to their website. Thus, sufficient time was guaranteed for each one to create the profile, to modify it after receiving feedback from the instructor or his or her peers, and to re-submit it following additional reviews and revisions.

**Learning Objective** The Graduate Program in Asian Studies where the author works has established, for assessment purposes, a learning objective for the student cohorts in the teaching track. According to this learning goal, preservice teachers are expected to become competent in teaching Chinese as a foreign language in the K-12 setting by the end of the program. The preservice teachers' e-portfolios were thus evaluated based on this learning goal using the aforementioned rubric. To be more specific, the competence was examined from four perspectives. They were (i) whether preservice teachers were able to develop their teaching philosophy; (ii) whether they

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<sup>6</sup> Two experiments were tried before this project. In the first trial, only one technology savvy student was able to set up her portfolios on a website. All others handed in either traditional binders containing all the materials, and artifacts, or a combination of printouts with CDs. With the built-in function on *Blackboard*, students in the second experiment were required to use *Blackboard* to host their profile. While students all completed the works, they could not share them with others. This is because the profiles on *Blackboard* can only be accessed by the students who created them.

<sup>7</sup> As an open-source software, *WordPress* has two types of platforms: *WordPress.com* and *WordPress.org*. The former has both free and paid options, both running on the servers of *WordPress.com*, and the latter requires the user to download and install the *WordPress* software script on a local server. In other words, *WordPress.com* provides a service that enables one to get started relatively quickly, while *WordPress.org* requires more time and expertise to set up (e.g., Jones and Farrington, 2011; O'Neill, 2017).

<sup>8</sup> Well-known name brands like NBC Sports, TED, CNN, TIME use *WordPress*.

could produce a professional resume and provide an appealing introduction about themselves; (iii) whether they could design solid lesson plans; and (iv) whether their website was complete, professional and user-friendly.

**Measures Competence** Based on the above four criteria, each e-portfolio was scored by the instructor as follows. First, if a student developed a profound teaching philosophy with deep thinking and reflections, the individual would receive a full score of 7.5 points. Second, if the student produced an updated resume with an introduction highlighting his or her credentials, experience, and skills, the individual was awarded a perfect score of 7.5 points. Third, if the student presented well-prepared lesson plans, engaging activities, and a teaching demonstration, he or she garnered a score of 7.5 points. Finally, additional 2.5 points were given if the website exhibited a professional look and was easy to navigate. Thus, a total of 25 points indicated “excellent” work, a score of 20 points was considered “good”, and 15 points was “fair.”

**Measures Perceptions** In order to find out the preservice teachers’ perceptions about the creation of the portfolio, we administered a survey after the project was completed. The survey consisted of four multiple-choice questions, and three open-ended questions. The first and second survey questions solicited preservice teachers’ thoughts about their own learning on the whole and their individual growth in particular. The third survey question requested preservice teachers to reflect on their achievements through the project. The fourth and seventh questions invited participants’ opinions on the difficulty of the e-portfolio development. The fifth and sixth question surveyed their views about the benefits of the e-portfolio application, and their use of the e-portfolios in job searches.

#### 4. Results

**Overall Results** The scores of preservice teachers’ e-portfolios appear in Table 1. As can be seen, two of the ten participants achieved an excellent performance, and two were almost perfect (24.5 points), with one approaching the excellent (24 points). Four participants scored between excellent and good (achieving 21 and 22 points, respectively), and one received a good performance (20 points). This suggested that all the preservice teachers met the requirements.

**Table 1: Scores of Preservice Teachers’ e-Portfolios**

Areas Students	Teaching Philosophy	Professional Resume & Background	Lesson Plan & Activity	Navigation No Error	Total Points (25 points)
S1	7.5	7.5	7	2.5	24.5
S2	7	6.5	6.5	1.5	21
S3	7.5	7.5	7.5	1.5	24
S4	7.5	7.5	7.5	2.5	25
S5	7.5	7.5	7	2.5	24.5
S6	7	6.5	6.5	1.5	21
S7	7.5	7.5	7.5	2.5	25
S8	7.5	7.5	4.5	2.5	22

S9	7	6.5	7	1.5	22
S10	7	6	6	1.5	20

**Student Learning Experience** All the ten participants completed the survey. As the answers that students provided to the first and the fifth questions overlapped, we summarized their responses in Table 2. The left column of this table presents the six key phrases generated out of the commonalities of the students' writings with respect to their perceptions of the learning through the e-portfolio application, and of the benefits by such a project. The right column indicates how many participants had expressed that idea, who the participants were, along with sample quotes for illustration. As can be seen in Table 2, nine out of the ten participants explicitly remarked that they had learned how to build an e-portfolio in the form of a website. The know-how on website development represents advanced technology skills. As information, media and technology skills are a crucial part of a variety of skills set required for students of the 21<sup>st</sup> century (Partnership for 21<sup>st</sup> Century Learning, 2009), it is significant that preservice teachers acquire these skills and take advantage of technology throughout their careers. The remarks by S4, "... *The technology, which I learned helps me a lot for my current Chinese teaching*" indicates the student's satisfaction with the experience. It is also interesting to note that seven participants felt greatly benefited by the opportunity to promote themselves via the website, suggesting a progress in transforming from "modesty" (a virtue of traditional Chinese culture) to "expressive" (an attribute of an effective teacher). Furthermore, six participants noted the significance of reflection in the learning process. The following quotes, "*this project gives me an opportunity to let me think what I already did and what I should have done but I didn't in the past ...*" (S1), "*because I need to make the profile look abundant, I would push myself to ...record more teaching activities*" (S3), and "*Thinking more about how to become better Chinese teacher*" (S9), evidently demonstrated that these individuals had a clear goal in mind, and that they were constantly pursuing that objective.

From Table 2, we see that roughly half of the participants felt the project improved their understanding of the requirements of the teaching professional and English writing skills. Half of the participants found that the e-portfolios were useful for job searches. The four participants, S1, S3, S4, S5, who scored high in portfolio performance as shown in Table 1 felt they had made greater achievements. They were also the ones who reflected most about their progress. While S8 and S10 scored lower, both believed that they had advanced in different areas.

**Table 2: Perceptions of Preservice Teachers on Learning and Viewpoints about Benefits**

Preservice Teachers' Reflections	The Number of Preservice Teachers Who Had Similar Thoughts, with Sample Quotes
<b>a. Building a website</b>	<b>9 Preservice Teachers: S1, S2, S4, S5, S6, S7, S8, S9, S10</b> , e.g., <b>S1:</b> " <i>I learned how to build a useful website</i> " <b>S4:</b> " <i>I learned some technology about building the personal website, which is useful for me... The technology, which I learned helps me a lot for my current Chinese teaching.</i> " <b>S7:</b> " <i>I have learnt the basic skill to create the e-portfolio</i> " <b>S9:</b> " <i>How to design my website</i> "
<b>b. Promoting oneself</b>	<b>7 Preservice Teachers: S2, S3, S4, S5, S6 S8, S10</b> , e.g.,

	<p><b>S2:</b> “It is like a window which parents and employer could understand me deeply. Also, I could share my teaching inspiration and welcome to suggestions from my colleagues”</p> <p><b>S3:</b> “I learned how to promote myself and show my teaching experience and products which is very helpful for interview... it’s a great platform to demonstrate my teaching philosophy, teaching methods, activities, and students’ works.</p> <p><b>S5:</b> “that I can present the qualifications on what makes me a good language teacher.”</p> <p><b>S6:</b> “It’s an effective method to show my Chinese class directly. It’s a better way to show my resume directly and it’s also convenient for people who want to learn Chinese to check some course they really want.”</p> <p><b>S8:</b> “How to promote myself using website”</p>
<b>c. Reflecting on learning</b>	<p><b>6 Preservice Teachers: S1, S3, S4, S7, S8, S9, e.g.,</b></p> <p><b>S1:</b> “this project gives me an opportunity to let me think what I already did and what I should have done but I didn’t in the past as a Chinese language teacher or a student who want to be a Chinese language teacher....”</p> <p><b>S4:</b> “gave me an awareness of thinking how to show my teaching ability and my characters” ... “but also for myself to realize what I should do and how to do” “It gives me an opportunity to know more about myself and summarize the teaching material. I appreciate the feedback, and learned a lot from the other classmates. Without these, I may be stuck and cannot improve myself.”</p> <p><b>S8:</b> “It helped me review what I learned about teaching theory”</p> <p><b>S9:</b> “Thinking more about how to become better Chinese teacher.”</p>
<b>d. Understanding requirements</b>	<p><b>5 Preservice Teachers: S1, S4, S5, S9, S10, e.g.,</b></p> <p><b>S4:</b> “after I finished the project, I have a logical and clear understanding of my teaching target, what are the requirements of an effective Chinese teacher and my teaching philosophy”</p> <p><b>S9:</b> “Understanding the requirements of Chinese teacher ... Understanding more about the qualities of Chinese teacher”</p> <p><b>S10:</b> “Understanding the requirements”</p>
<b>e. Improving English writing skills</b>	<p><b>4 Preservice Teachers: S1, S2, S8, S9, e.g.,</b></p> <p><b>S1:</b> “...this project also improves my writing skills in English, since I have to write my resume, teaching philosophy and introductions of my teaching program in English.”</p> <p><b>S8:</b> “how to write teaching philosophy and introduction in an appropriate way.”</p> <p><b>S2:</b> “improving my English”</p>
<b>f. Searching for jobs</b>	<p><b>5 Preservice Teachers: S3, S4, S5, S7, S9, e.g.,</b></p> <p><b>S4:</b> “Above all, the e-portfolio helped me find a job and gave me a fully prepared interview.”</p> <p><b>S5:</b> “It is very helpful when looking for the job”</p> <p><b>S7:</b> “Useful when I search for job”</p>

In terms of the second survey question, *Did the project enable you to become a serious learner about the K-12 Chinese language teaching?*, all the participants answered YES, suggesting that the e-portfolio application has made them become more thoughtful about teaching Chinese in the K-12 setting. The third question, *During the process of developing your e-portfolio, did you achieve any progress in the following aspects?*, allowed each individual to select as many given statements as they believed best described their personal growth. The results of their choices are presented in Table 3. It is

clear from the table that almost all the participants thought that they had obtained a better understanding of requirements for Chinese-language teachers in the real world. Most of them became more committed to pursuing a Chinese teaching career in the K-12 setting. Again, many believed that they had improved English writing skills. Half of them felt that their sense of responsibility was raised, and their high-level critical and reflective thinking skills were improved as well. Four of the ten participants indicated that they had strived for professionalism. The self-evaluation from the preservice teachers as shown in Table 3 suggested that the experience enhanced their academic progress and personal growth. Those who scored high in terms of e-portfolio, i.e., S1, S3, S5, S7, had made significant progress, as shown by the selection of four aspects in Table 3. What is worth noting is that S9 seems to be a rising star among this group of preservice teachers. As this individual always reflected on how to be a better Chinese teacher, as in the comments, “*Thinking more about how to become better Chinese teacher*” mentioned above in Table 2, this individual felt he or she had progressed in as many as six areas. Again, the student, S10, who scored the lowest in Table 1, believed that he or she had made good progress in three areas.

**Table 3: Perceptions of Preservice Teachers about Accomplishments Obtained**

Statements of Six Accomplishments	Number of Preservice Teachers Selecting the Statement
a. Gained a better understanding of requirements for Chinese-language teachers in the real world	<b>9:</b> S1, S3, S4, S5, S6, S7, S8, S9, S10
b. Became more committed to, and serious about pursuing a teaching career in the K-12 setting	<b>8:</b> S2, S3, S4, S5, S6, S7, S8, S9
c. Improved high-level critical and reflective thinking skills about teaching and learning	<b>5:</b> S3, S5, S8, S9, S10
d. Increased the sense of responsibility	<b>6:</b> S1, S3, S4, S6, S7, S9
e. Improved English writing skills	<b>7:</b> S1, S2, S3, S6, S8, S9, S10
f. Strived for professionalism	<b>4:</b> S1, S5, S7, S9

Regarding the fourth survey question, *Is it difficult to complete the project?*, only two students commented about the difficulty, which will be discussed below when the seventh question is addressed. With respect to the sixth question, *Since you completed your website, have you ever used it for your job search*, seven students answered YES. Two mentioned that they used their websites as a sample in a STARTALK Teaching Training program, and received good feedback. This positive attitude toward their own e-portfolio was correlated with the perceptions that they provided when answering the fifth question regarding the benefits of the project.

For the seventh survey question that asked in what way the project was difficult, two students made comments. The student, S4, said, “*My answer to Question 4 is (b), but I remember that I need a lot of time. It is not difficult, but it needs time and patience.*” The other student, S10, expressed in Chinese, which was translated by the author as the following, “The portfolio requires many teaching plans and teaching materials, which

may not be difficult for those with teaching experience. It is very time-consuming as well as stressful for inexperienced students.”

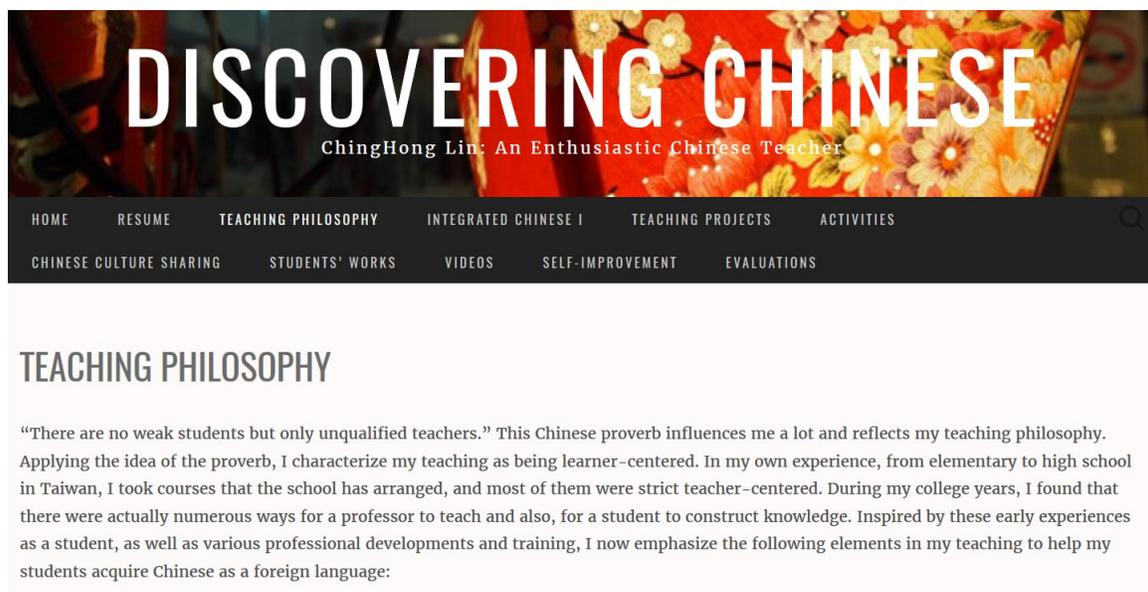
## **5. Discussion and Conclusion**

With respect to the primary research question, it was found the e-portfolio application contributed to Chinese-language teacher preparation in several areas and to varying degrees. First, Chinese preservice teachers gained a better understanding of the requirements for Chinese-language teachers. Secondly, they developed a greater commitment to a teaching career in the K-12 setting. Thirdly, they improved their level of critical and reflective thinking skills. Fourthly, they improved their English writing skills. Fifthly, they raised their sense of responsibility as a teacher. Finally, they became aware of the need to develop a sense of professionalism.

The successful creation of an e-portfolio and the students’ reflections on their experiences suggested that all the preservice teachers took the project seriously, and made good progress on an individual basis. It was observed that the opportunity of building an e-portfolio offered the potential to encourage students not only to work hard toward their learning objectives, but also helped them plan their learning journey. In order to complete the requirements of the portfolio, preservice teachers needed to establish learning goals, organize their self-regulated and self-directed learning, thereby building their autonomous learning (e.g., Gibson and Barrett, 2002; Cakir and Balcikanli, 2012). While they were developing their profiles, the preservice teachers constantly reflected upon the goal, the progress, and the challenge of their learning. The e-portfolio application provided a supportive context in which each individual was able to take responsibility for one’s own learning, i.e., controlling, monitoring and self-evaluating their progress. At the same time, they also had the freedom to discuss various issue with their peers, the instructor, and sometimes mentors, and receive feedback and support on a regular basis during the portfolio construction process. Such a learner-centered environment further facilitated learning autonomy, which would lead to teacher autonomy, an attribute necessary for teachers. When preservice teachers become autonomous learners, they help their future students to learn independently (e.g., Cakir and Balcikanli, 2012). The entire project stimulated learning and growth. Consequently, preservice teachers obtained a better appreciation of foreign language education standards and the qualifications necessary for teachers, formulated their own teaching style and personality, and developed their professionalism. The findings lend further support to the premise that developing portfolios enhances student learning, as discussed in the literature (e.g., Campbell et al., 2004; Imhof and Picard, 2009; Kecik et al., 2012). Our findings indicate that the participating students in the e-portfolio project raised competency and skills. We further believe that this experience reinforces preservice teachers’ dedication to lifelong learning (e.g., Frey, 2008).

The findings of this pilot study suggested that the creation of portfolios served as a method to evaluate the performance of each individual, and inform the instructor whether the students had achieved the goals, and in which areas the instructor should

further guide and coach the students. The data presented in Table 1 showed that all preservice teachers produced satisfactory work, with some exceeding expectations. As discussed before, even for those who did not achieve excellent scores, their self-evaluation in the post-project survey revealed that they had also made good progress in various areas. Being a process as well as a product, the e-portfolio fulfilled the formative and summative assessment roles (Middle States Commission on Higher Education, 2007). The process of developing e-portfolios satisfactorily offered continuing feedback not only to the instructor for adjusting and improving instruction quality, but also to the preservice teachers for self-monitoring and planning their learning. Such a formative assessment that informed and guided both parties proved to be constructive in the ongoing teaching and learning context. Because the preservice teachers took the entire ownership of the e-portfolio development, and they were informed in advance what they were expected to produce, the formative assessment practice was particularly helpful to them. When the e-portfolios were completed, the final learning outcomes enabled the instructor to evaluate each preservice teacher by reviewing his or her performance and comparing it against the standards or benchmarks (see Figure 1 for a screenshot of a partial sample of a preservice teacher's e-portfolio). The findings that the e-portfolio project was able to motivate and evaluate student learning simultaneously support the argument for the dual-goal of portfolios in education, as postulated by Zeichner and Wray (2001) and Tucker et al. (2002). Our results also align with the study by Struyven et al. (2014), who found that the e-portfolio had proven to be a useful instrument for evaluating as well as developing teacher competences.



**Figure 1. Screenshot of a partial sample of a preservice teacher's e-portfolio**

With respect to the research question about the added value of technology associated with portfolio applications, some findings are particularly worth noting. First, the e-portfolio construction enabled all the participants to succeed in developing a professional-looking website, which advanced their multimedia and information technology skills in addition to their creative thinking and problem-solving skills. This

set of digital skills will be extremely helpful to preservice teachers when they educate their future tech-savvy students. These so called “digital natives” in the sense of Prensky (2001) may know more about technology than their teachers, yet some are not skilled enough to apply technology to advance their learning (Kuriscak and Luke, 2009). Some students may be strong with playing special technology, i.e., the technology that is involved in the programs especially designed for generating funs, but less experienced or motivated with utilizing technology for learning.<sup>9</sup> In addition, the fact that the nature of e-portfolios — being accessible to anyone — pushed the preservice teachers to be conscientious about the process as well as the product. As compared with our previous two experiments with portfolio application, the enthusiasm of the preservice teachers, the quality of portfolios, the student learning experience and their final accomplishments for the current project were all superior to our past experiences. The preservice teachers expressed that they specifically benefited a great deal from the digital format of the portfolios. Many participants remarked on the value that technology added to their work. References to “*multi-media*,” as highlighted by the participant S9, and the comment by S6, who noted how e-portfolios can “*combine teacher’s resume with their Chinese courses together*,” illustrate the versatility of the technology used in creating e-portfolios. Knowing that their portfolios were to be posted online in the public domain, all the preservice teachers strived to make their profiles look as professional as possible. The participants reviewed and revised each item of content several times before uploading them so as to ensure that they were accurate and appropriate. For the participants for whom English was not their native language, such a process offered them an opportunity to improve their writing skills, which is absolutely necessary for a qualified Chinese-language teacher in the K-12 setting. Thirdly, *WordPress*, which provided flexibility in how materials could be organized, and displayed, helped the participants to think more logically when laying out their profiles, which helped expand web design skills, which, in turn, may further have fostered their critical thinking skills. This kind of experience is well captured in the following observation of a participant:

S4: ... *I have to summarize the teaching materials and then upload to the website. Before that, I did not sort of these materials ...This project made me [think] more clearly about what kind of the materials I need to use...*

Finally, unlike the paper-based portfolio which has to be mailed to potential employers, the e-profile is available online, and therefore easy to share with potential employers. The finding that the majority of the participants used their e-portfolio as part of their job searches represented another advantage, which emerged from this technology as illustrated by the following.

S5: “*The e-portfolio arranges all the information together which helps the interviewer find everything they want to know about a candidate. Compared with a normal paper resume, it actually shows the candidate in a teaching demo. This is important because the employer can see if the qualifications in the resume are reflected in the candidate’s demo. One of*

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<sup>9</sup> Hill and Cook (2011) noted that of the group of millennials, some are even “technophobes” (p. 37).

*the interviewers told me that he was very impressed with my e-portfolio because he said that I clearly demonstrated my skills to him.”*

Like any research, this study has its limitations. One major weakness is the small number of participants, and the fact that they came from one class. Thus, the findings may not be sufficiently representative of large student cohorts. It would be ideal to explore the research questions with a larger and randomized sample. The second limitation is related to the following two concerns: were all the accomplishments as shown in Table 1, 2, and 3 attributed by the mere completion of the e-portfolios? could it be possible that the practicum experience also contributed to the learning progress? It is difficult to tease out the practicum experience or exclude other factors. However, it is clear that it was through engaging this project that the preservice teachers were encouraged to participate in practicum training which, in turn, resulted in the enhancement of their learning. In addition, while the study has lent further support in validating *WordPress* as a powerful platform for hosting portfolios, as reported in the existing literature, little was done on its effectiveness as a learning tool. In other words, the current study did not examine how the blogging feature embedded in *WordPress* could be utilized to enhance active learning.<sup>10</sup> Scholars have studied the use of *WordPress* as a content management system (e.g., Jones and Farrington, 2011; Avila et al. 2016; O’Neill, 2017), yet the function of *WordPress* as a teaching and learning tool has received little attention. Therefore, research should be conducted to analyze the role of *WordPress* on facilitating preservice teachers’ learning through exchanges with the instructor and peers via its blogging and commenting mechanism. Along this line, the question of how online meaningful interactions and communications engage preservice teachers to learn and reflect as compared to in-class discussions and face-to-face coaching should be addressed. Also required would be the study comparing the benefits that the two different platforms, i.e., *WordPress.com* vs. *WordPress.org*, could contribute to both teaching and learning. The questions to be examined may include the following: which platform can better enable preservice teachers to communicate with one another effectively? How does the portability of *WordPress* on different devices facilitate teaching and learning? How does the capacity of *WordPress* to store materials in multimedia formats motivate preservice teachers to think and reflect about the materials that they have learned? It should also be noted that new software and new technologies may make the methodologies discussed herein obsolete.

Despite the limitations, in light of the findings from this pilot study, the preservice teachers’ reflections and accomplishments, we propose incorporating an e-portfolios construction in a Chinese-language teacher preparation program. E-portfolio development can be a part of the teacher education curriculum as an independent course or as a project for a given course. If it is implemented as a project, it would be ideal to start the project as soon as students enroll in the program, as proposed by Wolf and Dietz (1998) who advocated 3 phrases of e-portfolio. As the portfolio development is a time-consuming but important learning process, it is reasonable to engage the students in the process and product construction as early as possible. In so doing, preservice teachers

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<sup>10</sup>The blogging feature was not selected when students set up the template for their website.

will be able to learn and grow academically and professionally from an earlier stage. Secondly, we suggest teacher programs develop a framework that specifies the content required in the portfolios (see Snyder et al., 1998 for an example of a framework). Teacher trainers should help preservice teachers to determine the content in accordance with various courses at different learning stages. For example, for a theory-oriented course such as Applied Linguistics, students can develop a presentation on how languages are acquired, what theories explain first language acquisition and second language learning. If it is a Teaching Methods course, preservice teachers can create and add lesson plans and teaching activities to their portfolios. Thirdly, teaching faculty should provide sufficient time for students to consult their instructors and peers for input. Teacher trainers must provide or obtain technical assistance as needed for students. In this way, students would be equipped to examine, hypothesize, and reflect upon what they have learned, and ultimately apply what they have learned. Implementing these recommendations will help assure that the portfolios will be of high quality and the students will fulfill their learning goals. Fourthly, faculty of the education program should collaborate with the mentors and administrators in the K-12 setting. As noted by Zeichner and Wray (2001), incorporating the assistance of the teachers from the K-12 setting into the portfolio development process will help preservice teachers to effectively reflect upon and evaluate their learning. Preservice teachers will learn from the experienced teachers in the real-world, while being able to network with the teaching community.

To conclude, this paper examines whether the e-portfolios development serves as a learning method as well as an assessment tool, and whether utilizing the element of technology to portfolio development adds further value. This project demonstrated that engaging preservice teachers in the development of portfolios can place them in a supportive contextualized position to start their learning journey, and advance academically and professionally. We have also shown that building portfolios digitally on an independent website via *WordPress* can cultivate preservice teachers' advanced multimedia and information technology, critical thinking, and creative skills. In terms of the journey of transformation, we found that preservice teachers make progress in six areas through the implementation of the e-portfolio. Although great effort was required to build their profiles, the development and completion of e-portfolios granted teacher candidates a unique and valuable opportunity to reflect upon their learning objectives, the course material, and their professional career development. By reflection and practice, the would-be teachers have come to understand and appreciate the professional requirements, teaching methods, and instructional skills. Our study indicates that the e-portfolio application represents a valuable addition to the curriculum of training Chinese teachers.

## References

ACTFL. (2006). *Standards for foreign language learning in the 21st century*. Lawrence: Allen Press.

- ACTFL. (2002). Program standards for the preparation of foreign language teachers. Retrieved from <http://www.american.edu/cas/education/pdf/upload/actfl2002.pdf>
- Armstrong, D. G., Henson, K. T., & Savage, T. (2005). *Teaching today: An introduction to education*. Upper Saddle River, NJ: Pearson.
- Avila, J., Sostmann, K., Breckwoldt, J., & Peters, H. (2016). Evaluation of the free, open source software WordPress as electronic portfolio system in undergraduate medical education. *BMC Medical Education*, 16(157), 1-10.
- Bal, A. P. (2012). Teacher candidates' point of views about portfolio preparation (Turkey setting). *Cukurova University Faculty of Education Journal*, 4(2), 87-102.
- Barrett, H. (2011). *Balancing the two faces of e-portfolios* (2nd ed.) British Columbia: Ministry of Education, Innovations in Education. Retrieved from <http://electronicportfolios.org/balance/balancingarticle2.pd>.
- Birgin, O. (2011). Pre-service mathematics teachers' views on the use of portfolios in their education as an alternative assessment method. *Educational Research and Reviews*, 6(11), 710-721.
- Bullock, A. A. & Hawk, P. P. (2001). *A guide for preservice and practicing teachers*. Upper Saddle River, NJ: Merrill Prentice Hall.
- Cakir, A., & Balcikanli, C. (2012). The use of the European portfolio for student teachers of languages (EPOSTL) to foster teacher autonomy: English language teaching (ELT) student teachers' and teacher trainers' views. *Australian Journal of Teacher Education*, 37(3), 1-16.
- Campbell, D. M., Cignetti, P. B., Melenyzer, B. J., Nettles, D. H., & Wyman, R. M. (2004). *How to develop a professional portfolio. A manual for teachers*. New York: Pearson.
- Demirel, M., & Duman, H. (2015). The use of portfolio in English language teaching and its effects on achievement and attitude. *Procedia - Social and Behavioral Sciences*, 191(2), 2634-2640.
- Everson, M. (2009). The importance of standards. In M. Everson, & Y. Xiao (Eds.), *Teaching Chinese as a Foreign Language*. Cambridge, MA: Cheng & Tsui Company.
- Fasanella, K. (2002). *The professional teaching portfolio as a tool for formative evaluation: A case study* (Unpublished doctoral dissertation). Seton Hall University, New Jersey.
- Foote, C. J., & Vermette, P. J. (2013). Teaching portfolio 101: Implementing the teaching portfolio in introductory courses. *Journal of Instructional Psychology*, 28(1), 31-37.
- Frey, T. (2008). Determining the impact of online practicum facilitation for in-service teachers. *Journal of Technology and Teacher Education*, 16(2), 181-210.
- Gibson, D., & Barrett, H. (2002). Directions in electronic portfolio development. *Contemporary Issues in Technology and Teacher Education*, 2(4), 556-573.
- Hill, J., & Cook, P. (2011). First-Year Seminar Blogs. In Jones, K. M. L. and Farrington, P. (Eds.), *Using WordPress as a library content management system*. Chicago, IL: ALA Editions of the American Library Association.
- Imhof, M., & Picard, C. (2009). Views on using e-portfolios in teacher education. *Teaching and Teacher Education*, 25, 149-154.

- Jarvinen, A., & Kohonen, V. (1995). Promoting professional development in higher education through portfolio assessment. *Assessment and Evaluation in Higher Education*, 20(1), 25-36.
- Jones, K. M. L., & Farrington, P. (Eds.). (2011). *Using WordPress as a library content management system*. Chicago, IL: ALA Editions of the American Library Association.
- Kecik, I., Aydin, B., Sakar, N., Dikdere, M., Aydin, S., Yuksel I., & Caner, M. (2012). Determining the feasibility of an e-portfolio application in a distance education teaching practice course. *The International Review of Research in Open and Distance Learning*, 13(2), 160-180.
- Kilbane, C. R., & Milman, N. B. (2003). *The digital teaching portfolio handbook: A how-to guide for educators*. Boston: Allyn and Bacon.
- Kim, Y., & Yazdian, L. S. (2014). Portfolio assessment and quality teaching. *Theory Into Practice*, 53, 220-227.
- Kuriscak, L. M., & Luke, C. L. (2009). Language learner attitudes toward virtual world: An investigation of Second Life. *CALICO Monograph Series*, 8, 173-198.
- Lee, J., & Vanpatten, B. (2003). *Making communicative language teaching happen*. New York: McGraw-Hill.
- Lightbown, L., & Spada, N. (2013). *How languages are learned*. Oxford: Oxford University Press.
- Martin-Kniep, G. (1999). *Capturing the wisdom of practice*. Alexandria, VA: Association of Supervision and Curriculum Development.
- McKinney, M. (1998). Preservice teachers electronic portfolios: Integrating technology, self-assessment, and reflection. *Teacher Education Quarterly*, 25(1), 85-103.
- McColgan, K., & Blackwood, B. (2009). A systematic review protocol on the use of teaching portfolios for educators in further and higher education. *Journal of Advanced Nursing*, 65(12), 2500-2507.
- Middle States Commission on Higher Education. (2007). *Student learning assessment: Options and resources*. Retrieved from [https://www.msche.org/publications/SLA\\_Book\\_0808080728085320.pdf](https://www.msche.org/publications/SLA_Book_0808080728085320.pdf)
- Moya, S. S., & O'Malley, J. M. (1994). Portfolio assessment model for ESL. *Journal of Educational Issues of Language Minority Students*, 13, 13-36.
- Ogan-Bekiroglu, F. (2014). Quality of preservice physics teachers' reflections in their teaching portfolios and their perceived reflections: Do they intersect? *Action in Teacher Education*, 36(2), 157-170.
- O'Neill, J. L. (2017). Deploying a WordPress-based learning object repository to scale up instruction and effect a culture of sharing. *Reference Services Review*, 45(1), 131-140.
- Partnership for 21<sup>st</sup> Century Learning. (2009). Framework for 21st century learning. Retrieved from <http://www.p21.org>
- Prensky, M. (2001). Digital natives, digital immigrants. *On the Horizon*, 9(5), 1-4.
- Price, K. (2013). Using the teaching portfolio to anticipate programmatic assessment. *Business Communication Quarterly*, 76(2), 207-215.
- Shulman, L. (1988). A union of insufficiencies: Strategies for teacher assessment in a period of reform. *Educational Leadership*, 46, 36-41.

- Shulman, L. (1998). Theory, practice, and the education of professionals. *Elementary School Journal*, 98(5), 511-526.
- Snyder, J., Lippincott, A., & Bower, D. (1998). The inherent tensions in the multiple uses of portfolios in teacher education. *Teacher Education Quarterly*, 25(1), 45-60.
- Struyven, K., Blicek, Y., & De. Roeck, V. (2014). The electronic portfolio as a tool to develop and assess preservice student teaching competences: Challenge for quality. *Studies in Educational Evaluation*, 43, 40-54.
- Tucker, P., Stronge, J., & Gareis, C. (2002). *Handbook on teacher portfolios for evaluation and professional development*. New York: Routledge.
- Worf, K. (1996). Developing an effective teaching portfolio. *Educational Leadership*, 53, 34-37.
- Wolf, K., & Dietz, M. (1998). Teaching portfolios: Purposes and possibilities. *Teacher Education Quarterly*, 25(1), 9-22.
- Zeichner, K. (2000). Ability-based teacher education: Elementary teacher education at Alverno College. In L. Hammond (Ed.), *Studies of Excellence in Teacher Education: Preparation in the Undergraduate Years*. Washington, DC: AACTE.
- Zeichner, K., & Wray, S. (2001). The teaching portfolio in US teacher education programs: What we know and what we need to know. *Teaching and Teacher Education*, 17, 613-621.
- Zou, M. (2003). Organizing instructional practice around the assessment portfolio: The gains and losses. *The Professional Educator*, 26(1), 73-81.

### Appendix: Rubric for Rating e-Portfolios

Criteria	Proficient 25	Acceptable 20	Needs Improvement 15	Unacceptable 0
<b>Teaching Philosophy &amp; Background Information</b>  30%	The professional philosophy is clearly described with sufficient evidence to justify beliefs. A current resume is provided with reasonable professional goals.	The professional philosophy is clearly defined with some general justifications for beliefs. Current resume and general professional goals are provided.	The purpose of the philosophy is described. No justifications for beliefs have been included. Current resume and professional goal are unclear.	The professional philosophy is unclear. Resume is not up to date or is generic in nature, educational philosophy and professional goals are not provided.
<b>Teaching &amp; Evaluation</b>  30%	Student teaches at a school for a period of required time, which exceeds the requirements, and performs very well, with an excellent evaluation from the mentor.	Student teaches at a school, with some time, performs well, and receives a satisfactory evaluation from the mentor.	Student teaches at a school with inadequate time, with an ok performance. The evaluation from the mentor is barely satisfactory.	Student teaches at a school for a limited time; did not receive an evaluation from the mentor.
<b>Lesson Plans &amp; Teaching</b>	Students prepares 5 lessons plans, each containing clear	Students prepares 5 lesson plans, each containing objectives,	Students prepares 5 lesson plans, with some objectives, focused	Students did not prepare 5 lesson plans, with no

<b>Activity</b>  <b>30%</b>	objectives, focused content, detailed procedures, and engaging material.	content, procedures, and good material.	content to some extent. Some procedures are not clear. Some material is good.	objectives or content, or detailed procedures.
<b>Navigation</b> <b>Professional Look with No Errors</b>  <b>10%</b>	The portfolio is easy to navigate, with a user-friendly professional structure, which reflects extra components and exceeds normal expectations. Errors or typos are eliminated.	The portfolio is easy to navigate, with a structure that satisfies expectations, includes required components, and is representative of professional work. Errors or typos are almost eliminated	The portfolio lacks required components, weak in components illustrated, unprofessional presentation techniques utilized. Some errors or typos are found.	The portfolio is incomplete in required and selected components, incorporates unprofessional presentation techniques, demonstrates inferior work, and is unacceptable. There are many errors or typos.
<b>Overall Rating</b>	<b>Excellent</b>	<b>Good</b>	<b>Fair</b>	<b>Poor</b>