



EPORTFOLIO SYSTEM FOR PRESERVICE DISTANCE TEACHER EDUCATION PROGRAM: AN ALTERNATIVE ASSESSMENT STORY FROM BOXES THROUGH ECONTAINERS

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Summary

The purpose of the current study was to explore strength of the ePortfolio portal in terms of assessment issues as well as motivational and cognitive benefits of it for participants in the distance learning environment. Sixty preservice teachers using ePortfolio portal were surveyed at the end of the directed field experience course at the Early Childhood Distance Teacher Education Program in Anadolu University, Turkey. Additionally, the interviews were conducted with 12 teachers participating in the pilot to provide a more in-depth understanding of the issues and share their experiences during the course. Instead of traditional paper-based portfolio system, ePortfolio portal provided students opportunity to revisit and revise their work based on multiple feedback sources in a certain time and an expansion of skills and knowledge. Benefits specified by preservice teachers and practicum teachers in the pilot study showed the promise of ePortfolio. Both inservice and preservice teachers agreed that technology access and skills of users should be searched before implementing such a web-based portfolio program.

Introduction

Since performance-based assessments have become popular, integrating portfolio assessment into instructional process has been seen as an alternative and innovative strategy in teacher education programs. Portfolios have a long history of use as summative assessment tools in many disciplines to organize and present work and to demonstrate progress and accomplishments over time. Portfolios have been also utilized to build a context for discussion and review and feedback from instructors, tutors, colleagues and peers. Research also shows that portfolio development engages the participant in active learning activities including

researching, observing, questioning, problem solving, scholarly writing and synthesizing (Herner-Patnode & Lee, 2009).

Both with work becoming increasingly digital and for students working at a distance, electronic way of this technique is rapidly gaining acceptance for its value as formative compilations in a much broader range of disciplines (Abrami & Barrett, 2005; Barrett & Knezek, 2003; Lin, 2008). Unlike traditional portfolios, ePortfolio assessment systems have remarkable advantages for distance users, including offering unlimited synchronous and asynchronous interactions at any time and place, cataloging and organizing learning/course materials through a single electronic storage and eliminating problems in administering. Herner-Patnode and Lee (2009) claimed that the web-based portfolio is one tool to affect a positive change in preservice teachers' knowledge, skills, and dispositions towards teaching and technology (p. 109). It is also highlighted that compared with more traditional assessment tools, ePortfolios serve as an important approach with which to engage and motivate students to learn (Lin, 2008).

Perhaps more importantly, web-based ePortfolio systems encourage evaluators to provide constructive feedback and students to reflect critically and support personal and professional growth and life long learning in a distance manner. In the same vein, the power of the reflection and feedback is that it helps students and teachers move beyond seeing web-based portfolio as a mere alternative assessment tool to appreciating its value as a teaching and learning strategy (Lin, 2008).

Therefore, such an innovative system was piloted in the Early Childhood Distance Education Program at the Anadolu University and served as a comprehensive assessment tool to evaluate preservice teachers' learning in a practicum course during 2007-2008 academic term and effectiveness and sustainability of the system for further implications. The pilot study confirmed that ePortfolio portal is a successful and effective assessment tool as a future resource in distance teacher education programs.

Purpose of the Study

The pilot application was assessed and evaluated in three realms: *Design process, return on investment of the program* and *assessment process*. The purpose of this part of the study was specifically to discuss strength of the ePortfolio portal in terms of *assessment issues* as well as motivational and cognitive benefits of it for participants in the distance learning environment.

Method

An action-oriented case study was applied in this study since the authors of the current study also served as academic advisors during the pilot project. Action research methodology requires a systematic approach to introducing innovations in teaching and learning. Since the implementation of the ePortfolio assessment process in a distance context is a unique evaluation technique for higher education, there is need to deepen the understanding of different voices as a basis for action and change.

Setting and Participants

The research conducted at the Early Childhood Teacher Education Program in the Open Education College in Anadolu University, Turkey. The participants in this study were 60 preservice teachers, 12 early childhood practicum teachers and 10 faculties from Anadolu University served as academic advisors. Students and their practicum teachers were selected using a random cluster sampling design based on 7 major geographical regions in Turkey.

Description of the Program

There are more than 2,000 students enrolled in this course at the stage of directed field experience from all around Turkey and needed to complete a paper portfolio at the midterm and the end of the internship for meeting program exit requirements in the traditional mode of the course. Both practicum teachers and academic advisors then evaluate these files two times a year during the course. Obviously, it is quite labor intensive and demanding work considering the time limitation, number of students and storage issues. On the other hand, students who took part in the ePortfolio pilot project were able to upload their assignments regularly to the portal.

During the project, preservice teachers expected to submit 24 assignments as reflections of the structured classroom activities based on their observations and field notes. Both teacher and academic advisor involved in students' assessment process at the same time.

Data sources

To measure practicum teachers' and students' perspectives of the ePortfolio system, a student questionnaire was administered via the portal at the end of the course and selected interviews were conducted during the midterm and the final exam. The questionnaire included 36 items that asked preservice teachers' technology proficiency and views on the e-portfolio portal. Students were asked to respond to a 5 point Likert scale (from "strongly disagree" to "strongly agree"). Additionally, the interviews were conducted with 12 practicum teachers participating in the pilot to provide a more in-depth understanding of the issues and share their experiences

during the course. The five key issues were investigated for the development and the implementation of the portal under the following headings: portal's interface, administration of the program via the portal, technical facilities, communication, and educational issues.

Results

The findings revealed that preservice and practicum teachers' responses and experiences reflected both negative and positive views on the ePortfolio assessment system. The following figures showed the results of the students' questionnaire with descriptive statistics. The percentages were based on the number of the students (n=60) responding the survey. Overall, preservice teachers appeared to find ePortfolio assessment system as an innovative and alternative approach. Students were committed to ePortfolio as a benefit to their learning during the course.

The findings of the first key issue showed that a majority of the students had no difficulties using portal. They reported that the portal's interface, in terms of language and physical appearance of texts, graphical design, transition of the pages, was user-friendly and simple to navigate (see Figure 1).

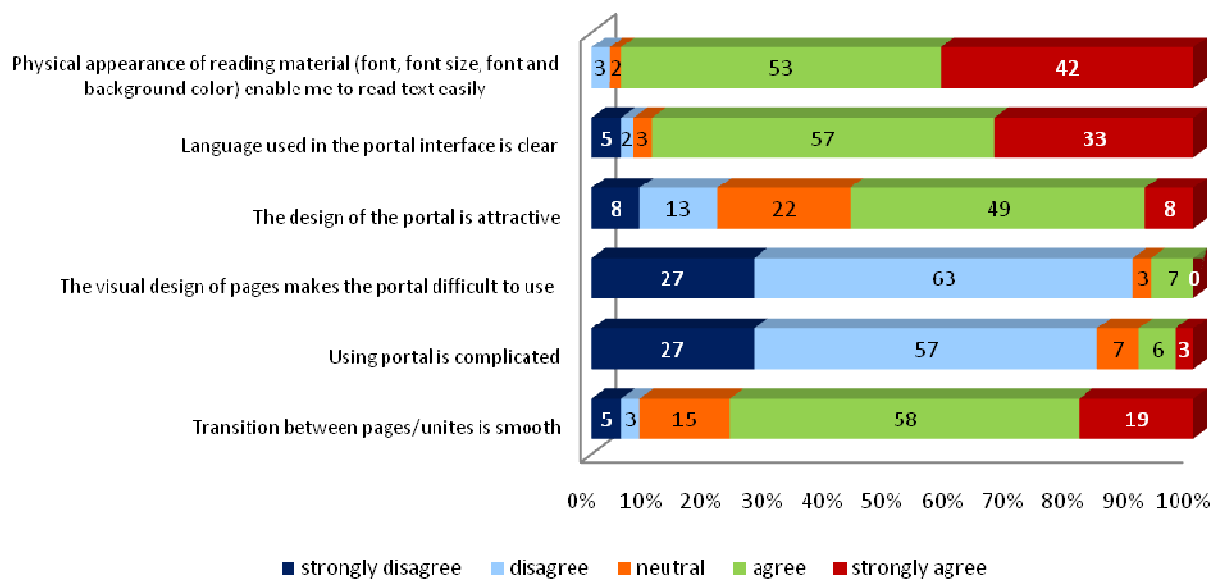


Figure 1. Students' views on the general appearance of the ePortfolio web portal

Preservice teachers were also asked to rate their views on administration issues related to the portal. As can be seen in Figure 2, more than half of the preservice teachers reported that the

course instructions and tools as convenient and an easy way to get information. Almost all of them (92 %) indicated that having feedback from multiple sources enhanced their motivation and willingness to learn. They also highlighted that regular weekly requirement of submitting assignments made them to use time more effectively and efficiently.

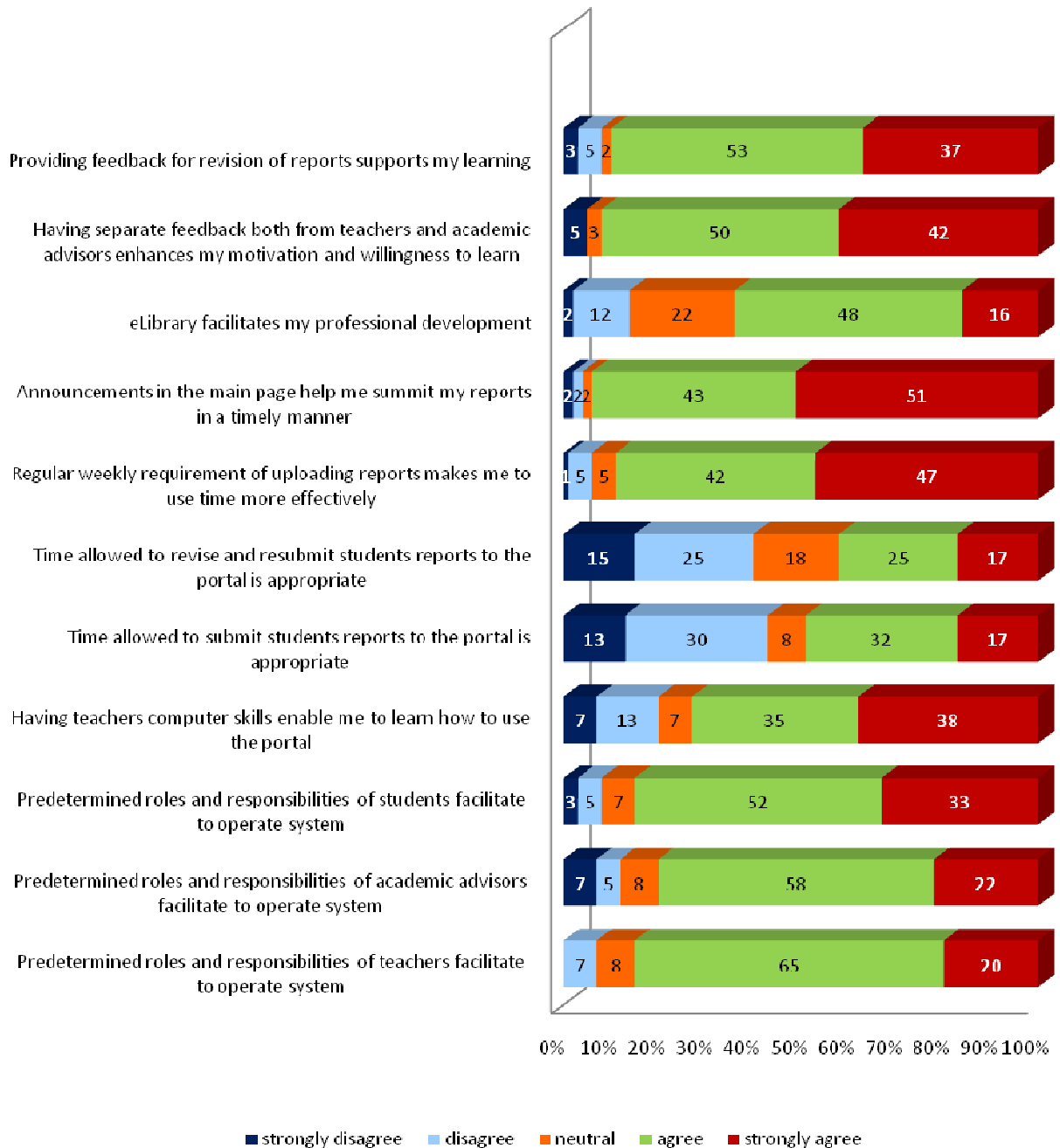


Figure 2. Students' views on the administration of the ePortfolio system

Despite the positive views on the appearance and the administration of the portal, some technical difficulties such as accessibility in technical support and resources, were reported by some preservice teachers in the survey. Even though they indicated that the information covered in the user's manual of the portal is adequate, sometimes they could not reach a technical support staff or products quickly.

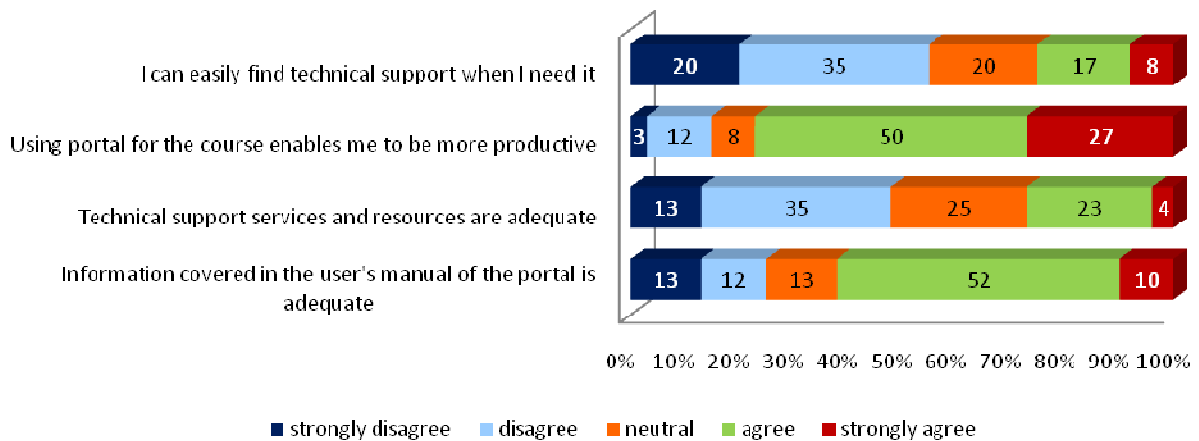


Figure 3. Students' views on the technical facilities of the ePortfolio system

Even if the preservice teachers indicated that the discussion board assisted them in communicating with their peers, more interaction tools and facilities should be implemented into the portal's environment to enhance communications among users (Figure 4).

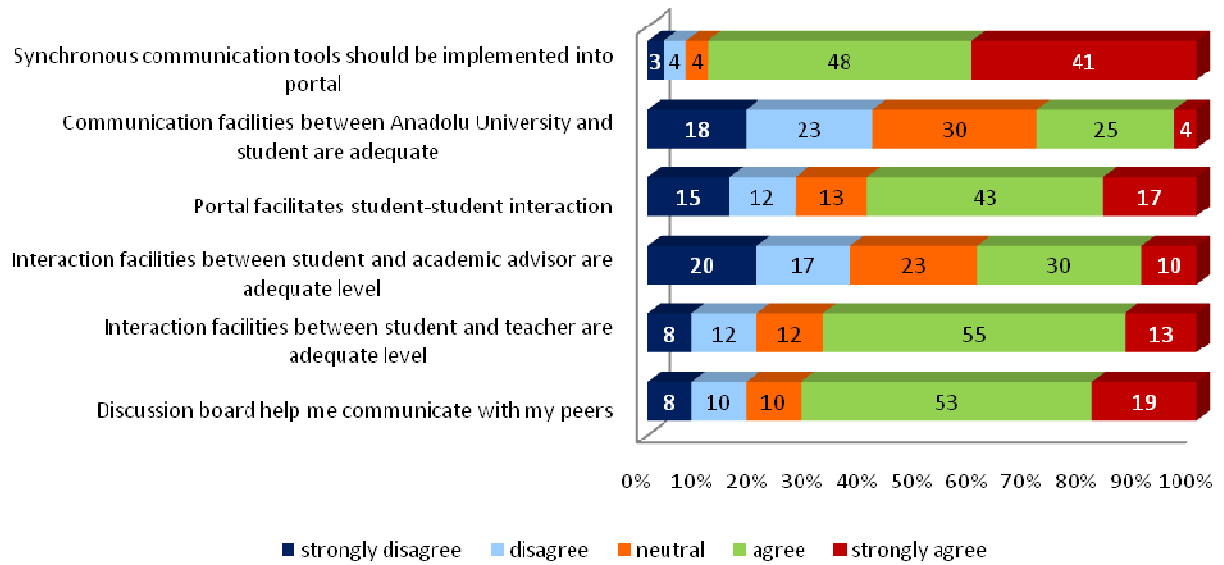


Figure 4. Students' views on the communication facilities of the ePortfolio system

The preservice teacher strongly believed direct guidance or technical training before participating to such a program. They also reported that ePortfolio assessment system was quite functional and increased their computer literacy skills. Other benefits of having the ePortfolio reported by preservice teachers were that they felt more special than the other students in the traditional program.

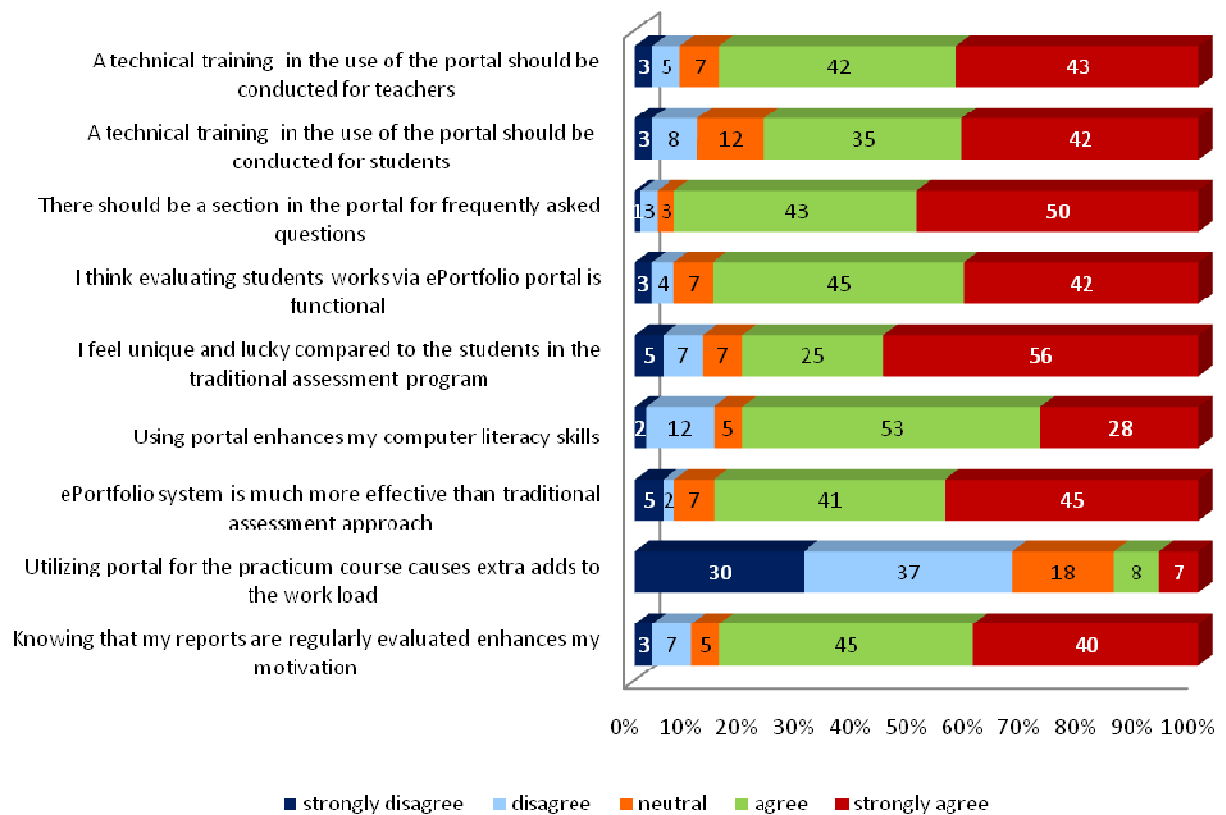


Figure 5. Students' views on educational benefits of the ePortfolio system

The following findings were compiled and summarized the practicum teachers' views on ePortfolio system:

What experience do you have with using ePortfolio portal during the practicum course?

A majority of the practicum teachers indicated that the ePortfolio was more systematic, organized and manageable assessment tool both for students and teachers. They felt the systems enable students to develop the self-discipline as well as improve their computer literacy skills. Comparing to the traditional paper-based portfolio system, they thought that it was more objective and effective method in terms of the monitoring, management and evaluation of the system. They also stated that it is very innovative performance-based assessment model.

What do you think about the educational services offered during the course?

The practicum teachers indicated that the Guidelines for practicum training supported in

developing effective strategies for teaching and preparing field reports. They felt that the eBook and online materials related to the practicum course placed in the portal guided them. They indicated that eLibrary was another essential source for the course. All teachers mentioned that they directed students to use the eGuide to grammar and writing. Samples of the course reports and other support materials were also found to be useful. Most of the teachers stated that the portal had a unified, user-friendly interface and color scheme.

What do you think the time period allowed for uploading weekly assignments?

Students required uploading their assignments in an allocated time slot predetermined as two weeks. Most of the teachers reported the given time for assignments was appropriate while one teacher commented that her students needed extra time to prepare more structured and detailed reports.

Do you think you provided valuable feedback to your students and contributed their learning?

Teachers mentioned how the reflection and feedback helped students in the project see their mistakes, revise their work on time and reinforce what they have learned comparing to students in the traditional assessment system. A majority of them highlighted that ePortfolio utilizing an immediate feedback mechanism help students rediscover their learning experiences in more specific way. The teachers believed that the system encouraged students to become entrepreneurs and researchers. One teacher said:

Students learned what an early childhood teacher should be. Basically, they felt responsible of their learning.

On the other side of the coin, two teachers acknowledged that some students were not used feedback in an effective way.

What kind of feedback did you give to your students? In other words, what content did you include in your feedback?

Almost all teachers reported that they pointed students' grammatical errors and provided information about the expected format of the paper in their feedback. They also mentioned that they reviewed students' reports whether their objectives overlapped with their planned activities, the teaching or assessment methods and tools were appropriate.

How have you benefited from being involved in the ePortfolio system?

Teachers admitted that the guidelines and the sample activities assisted them in understanding the system and improving quality of teaching and mentoring through use of these assessment procedures. They also reported that they have not had an experience in computer based evaluation. They felt ePortfolio system provided sustained professional development to help them improve technology literacy, alternative assessment tools and integrate technology tools for communication and teaching. One teacher noted that she had become aware of her incompetency during student-teacher interaction. Another teacher admitted the influence of the ePortfolio process and informed how it induced his preparation and implementation of the assessment practice: 'I felt it just gave me more responsibilities and I made an effort to improve myself.'

What would be the ideal number of students per practicum teacher and faculty to provide an effective supervision?

They suggested the maximum number of students per teacher or advisor should be 10. For beginner practicum teachers, they said 'this number should not be more than 5-6'. One teacher highlighted that student quality and performance would be more indicators on mentoring process than the number of students per teacher.

Would you have been willing to participate in this program as a practicum teacher if the participation was optional?

Except one teacher, all teachers interviewed provided a positive respond on this issue. They stressed that they definitely would like to volunteer in this project. The one who preferred not to get involved in a study asserted her lack of computer knowledge as a main reason.

Have you ever encounter any problems during the course and evaluation process? If any, please specify.

Although the potential benefits of utilizing ePortfolio assessment system regarding student learning, the implementing process is not without challenges and problems. Teachers mentioned that some of their students had faced with problems while submitting their reports and others did not demonstrate good teaching performance even if they had no struggle with using ePortfolio portal. Some technical and administrative difficulties (differences in word processing programs (Word 2000, 2003, 2007), connection problems, needs for technical support) were signified as typical problems by teachers.

Conclusion and Suggestions

The goal of this study was to investigate the effectiveness of the ePortfolio portal in terms of assessment issues as well as motivational and cognitive benefits. Results indicate that incorporating the use of ePortfolio assessment system is beneficial for both preservice and inservice teachers. The content analyses of preservice and inservice (practicum) teachers' reflection provide us with insightful suggestions of using an electronic portfolio. A majority of early childhood preservice teachers and practicum teachers indicated their positive views and attitudes to ePortfolio assessment system during the directed field experience course.

The participants in this study also had some remarks or suggestions for implementing ePortfolio system in a practicum course in future.

- Support services should be provided based on the real and immediate needs of students and staff.
- If the system will be disseminated to the all students in this program, preliminary study should be conducted to determine the level of students' computer literacy.
- User's guidelines to the portal should be well designed and informative.
- Students and teachers should get a technical training program.
- Portal should provide environments for synchronous and asynchronous interactions.
- Supplementary sources (books, links, etc.) should be offered to students.

Overall, although this pilot study provided us with a sight into future directions for the design and implementation of an electronic portfolio system, much research such as feasibility of the program, return on educational investment, etc., is still needed to conduct. Even though this is only a small-scale study documenting an individual college's effort in a distance teacher education program, benefits referred by preservice teachers and practicum teachers in the pilot study show the promise of ePortfolio assessment system to positively impact teacher education in a distance environment. Additionally, in coming years, we are planning to implement this assessment approach to a larger group to evaluate and validate the findings of the current study.

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