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Using Web-Based Portfolios in CALL Teacher Education

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Abstract

Professional development plays a significant role in ensuring that teachers are able to enhance their teaching skills and improve students' learning outcomes. In computer-assisted language learning (CALL) environments, language teachers need to understand instructional aspects of the Internet and know how to use the Internet effectively for teaching purposes. This chapter addresses the issue of the use of Web-based portfolios in language teacher education and responds to the question of how Web-based portfolios can be integrated into a formal professional development course for language teachers. A Web-based portfolio can be seen as a personal record demonstrating actual evidence of exploration, reflection and achievements online. It can be used as a tool for learning and assessment in language teacher training, taking advantage of electronic formats with hyperlinks to multimedia materials. The chapter presents an online postgraduate course, which combines guided modules and online discussions with investigatory components leading to the creation and submission of a structured Web-based portfolio. It also shows some examples of Web-based portfolios created by in-service teachers in the course and looks into the teachers' reflections on their own learning experience.

Introduction

Professional development is a key factor in improving teacher quality (Phillips, 2008; Pratt, Lai & Munro, 2001). It plays a significant role in ensuring that teachers are able to improve outcomes of student learning in their teaching contexts (Son, 2004b). Along with the widespread use of information and communication technology (ICT) in education, the integration of ICT into teaching and learning activities, in particular, is being recognized as a major component in teacher professional development (Pearson, 2003). In line with this, there has been a growing recognition that language teachers need to develop new skills and strategies required for the effective use of computer-assisted language learning (CALL). This chapter explores CALL teacher education, addresses the issue of the use of Web-based portfolios for language teacher training and responds to the question of how Web-based portfolios can be integrated into a formal professional development course for language teachers. For a practical discussion, the chapter presents an online postgraduate course, which combines guided modules and electronic discussions with investigatory components leading to the creation and submission of a structured Web-based portfolio.

Teachers in CALL Environments

CALL teachers work with computers in various ways, recognising the roles of computers in language teaching; understanding the basics of CALL and using CALL in actual teaching situations. In doing so, they are active, creative, innovative and open. In the CALL classroom, teachers take a leading role and ensure that learners use computers for certain activities or tasks properly. They try to: explore current development and use of CALL; choose appropriate hardware and software; learn how to use the computer system confidently; make CALL lesson plans; prepare suitable instructions, questions or tasks; guide or train students; monitor progress; facilitate interaction; evaluate CALL materials; and develop CALL competencies personally and professionally (Son, 2002).

The rapid growth of interest in e-learning has spurred many institutions to offer various online courses that attract students with great flexibility in study time and places and utilise a range of computer-mediated communication (CMC) tools (Son, 2004b). Postgraduate programs offered by universities are considered as a form of formal professional development for teachers,

whereas online professional networks or communities can be categorized as a form of informal professional development for teachers (Trewern & Lai, 2001). In a way of responding to the question of how teachers can improve their knowledge and skills in e-learning environments, Son (2004b) suggests three elements of teacher development: communication, collaboration and reflection. He states that online teacher development activities should be based on interactive communication, professional collaboration and critical reflection to achieve a high degree of personal and professional development.

Constructivism in Teacher Education

Constructivism can be defined as a theory about how people learn, which claims that people construct their own knowledge. It appears to be grounded in cognitive construction of knowledge (Piaget, 1954, 1955, 1970) and social construction of knowledge (Vygotsky, 1962, 1978). It emphasizes the combined cognitive and sociocultural impact on learning (Brooks, 2002; Brooks & Brooks, 1993; Fosnot, 1996) and gives its focus to the learner's individual development (Kaufman, 2004). In a discussion on the reconceptualization of teacher education programs, Kaufman (2004) highlights constructivist approaches, encouraging teachers' "active engagement and autonomy, construction of knowledge through inquiry and reflection as well as involvement in interdisciplinary investigation, collaborative endeavors, fieldwork opportunities for experiential learning, and self-observation and evaluation" (p. 311).

With the support of digital technologies, constructivist learning environments can be created and offered easily in teacher education. They can be virtual, nonlinear, multidimensional, interactive, dynamic, exploratory and experiential. They expand professional development opportunities for teachers by using constructivist approaches. For example, a discovery approach using a constructivist model can foster language teacher development (Son, 2004b). The approach attempts to promote autonomy and creativity and enhance accessibility to and usability of resources for effective pedagogy in technology-enhanced learning environments, including Web environments.

Web-Based Portfolios in Teacher Education

In teacher education, portfolios are being increasingly used for learning and assessment purposes. Klenowski (2002) says that “a portfolio of work can be used for development and assessment of subject knowledge, acquisition of teaching skills and reflective practice, professional and vocational preparation and employment” (p. 1). In a more specific way, Mansvelder-Longayroux, Beijaard and Verloop (2007) consider a portfolio as an instrument to facilitate reflection and Coombe and Barlow (2004) emphasise the importance of a reflective element in portfolios. Rokita (2005) also asserts that portfolios should be “an aid towards the development of teacher autonomy” (p. 26) while Campbell, Melenyzer, Nettles and Wyman (2000) advocate the use of portfolios for performance-based assessment.

A Web-based portfolio can be seen as a personal record demonstrating actual evidence of exploration, reflection and achievements on the Web. It allows ‘learning by doing’ and the improvement of learning and teaching with Web resources. Gathercoal, Love, Bryde and McKean (2002) point out that the benefits of Web-based portfolios include: the elimination of storage problems; learner control over the presentation of contents; creative thinking and collaboration with others; and self-evaluation and reflection (pp. 31-32). Sorin (2004) also states that Web-based portfolios are helpful for building links to the professional world, collaborative learning, problem based and project based learning and authentic learning. Similarly, Pelliccione, Dixon and Giddings (2005) consider self-reflection as a great value of e-portfolios and McNair and Galanouli (2002) underline the importance of a reflective ICT portfolio in the context of teaching. Despite of these supports for Web-based portfolios, however, little has been reported on ways in which Web-based portfolios can effectively enhance the learning and teaching process in language teacher education yet.

Practical Examples

This section documents the implementation of portfolio assessment for a postgraduate course entitled ‘Internet-based language instruction’ (IBLI), which explores what teachers should know for the use of the Internet in language learning and teaching. The 15-week course could be taken as part of a Master’s program at an Australian university. It largely consists of two

modules. The first module, Internet literacy, begins with the background of the Internet by looking at the history of the Internet, Internet-related terms and basic information on the use of the Internet. It also discusses issues and ways of finding resources on the Internet and considers the creation of Web pages. The second module, Internet integration, looks into theoretical and practical aspects of the use of the Internet for language teaching purposes and explores CMC tools and Web-based language learning (WBLL) materials (Son, 2004a). For an overview of the course, see Figure 1.

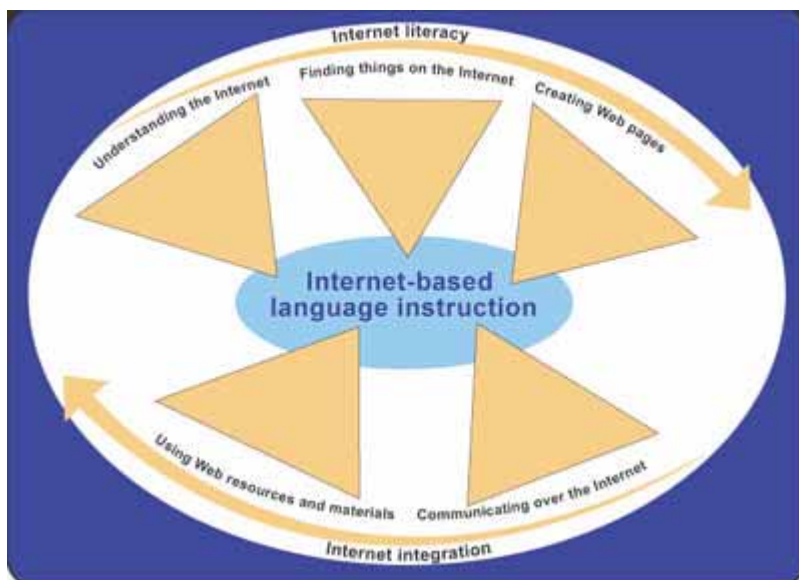


Figure 1. IBLI course overview (Son, 2004a)

The assessment for the course comprises two items: online discussion group contribution and a Web-based portfolio. Students (in-service language teachers in this context) are required to post their discussion group responses on a regular basis (at least weekly) throughout the semester. They are also required to create and publish a Website to display their portfolios while taking advantage of the suggested electronic format by including hyperlinks to multimedia materials both within and outside their Web pages. For the purpose of assessment, they have to submit a Web-based portfolio containing five basic pages: a homepage (showing a self-introduction and a table of contents); a research page (showing a review of the current literature on one aspect of the use of the Internet for language teaching); a teaching page (presenting an IBLI lesson plan); a resources page (presenting an annotated list of WBLL activities/tasks and an annotated list of Web sites for language

teacher development); and a reflection page (showing a reflective journal). Marking criteria for assessing the Web-based portfolio include: overview and overall presentation; critical review of the selected issue or topic; knowledge of key areas in the questions; description and applicability of the lesson plan; rationale for the selection/creation of Web resources; quality of reflective practice; and navigation and reliability of the portfolio.

The IBLI course gives teachers the opportunity to view coursework as an integral part of their professional growth. It emphasises that, in IBLI environments, teachers need to: understand how the Internet works; develop practical skills for finding and using Web resources and designing Web pages; know how to use a range of CMC tools and WBLL materials; identify critical factors associated with the integration of the Internet into language learning and teaching activities; and build up knowledge, skills and strategies for using language resources on the Web. This professional development is of value for a better understanding of IBLI implementation and more possibilities of reaching the goals of language teaching.

The following reflective journals illustrate six teachers' experiences with the creation of a Web-based portfolio for the IBLI course. These reflections provide evidence showing that the teachers were able to learn about IBLI by doing online activities and tasks themselves and making connections between learning and teaching in the format of a Web-based portfolio. The teachers agree that through their Web-based portfolio work they all could gain competence and confidence in the use of the Web for their teaching.

Perhaps the most beneficial aspect of this course for me has been the concrete realization that IBLI was not simply about using ready-made online resources in language learning, but more about the different ways web-based resources and communication platforms can be integrated into a communicative and constructivist approach to language teaching. The Internet is not only a great repository of authentic and language learning materials presented in various formats (text, audio, graphic or video), but also an invaluable source of language learning tools which lend themselves particularly well to task-based activities such as webquests, CMC-based activities (written or oral, synchronous or not), students' website-building, collaborative research projects, as well as independent learning. (Teacher A)

Shortly after putting the finishing touches on my portfolio, I showed my website to a colleague. “Wow! You really learned a lot in that course,” he commented. After he left, I sort of chuckled to myself. Up until that point, I hadn’t even considered what I had learned. I considered the online evolution my site had gone through, thinking back to its origins as a 3-link ‘hub’ and comparing that to the 10-page ‘behemoth’ on my screen. ... This course’s real forte, in my opinion, likely lies in its ability to empower us to create online learning materials. And I’m certain many of the benefits of the course are still forthcoming. I can’t imagine anyone simply deleting their portfolio in a month or so. On the contrary, I think most of us will add to it so it becomes an online expression of ourselves. (Teacher B)

My knowledge of the Internet has expanded over the duration of this course. While I had always used the Internet at home for personal uses, I had never considered its applications for the classroom much beyond the odd Web site which served my immediate purposes, for example, an origami Web site or hiragana quiz. This course has examined such an array of useful, authentic tools for language teaching, ranging from CMC activities such as discussion groups and chats, Blogs and Wikis, to evaluating pre-created activities and Web sites useful for students for practice and extension. I would have always put these things in the too hard basket before, but now I can see that with a little set up time, a valuable tool can be created for students that can be regularly used, in some instances as a superior teaching and learning method than more traditional methods. (Teacher C)

This course subtly emphasized the importance of social interaction in IBLI. In a sense, it presented trees to be or not to be seen as a forest. For me the forest was clear. We examined theories related to situated-learning, collaborative learning and constructivism. We considered the use and impact of blogs, wikis and social-networking. Having learned more about the collaborative learning potential of WebQuests, I created one of my own. And, obviously, we all created web-based portfolios. Indeed, for starting the course with a slight, Luddite’s cynicism, I ended feeling informed, proud and thankful for the experience. (Teacher D)

The creation of this web portfolio has been far more enjoyable and motivating than the general kind of required assignments. The creative effort and the choice in how and what to present, the variety of requirements presents a far more holistic and inclusive means of assessment, that and including the graded discussion boards. Most of all, it has afforded me the opportunity to develop my web design skills and better my professional use of the Internet and the benefits to me have been immediately noticeable and practical. (Teacher E)

The process of preparing this portfolio has made me feel more confident about developing Web-based resources for my students, and has enabled me to extend their language learning environment beyond the confines of the classroom. It has also forced me to reexamine scholarly guidelines on best practice and to learn from more experienced Web developers by analysing their source code. As a marketing tool, the *product* will enhance the profile of our program of study and justify its film-based component to key stakeholders. The annotated lists of online resources will be of immediate value to my students and colleagues. (Teacher F)

Some selected Web-based portfolios submitted as a final outcome of the course can be found from <http://www.usq.edu.au/users/sonjb/ibli/>. Each portfolio has a different layout, look and story, while containing the required content pages. Two example pages of teaching and resources from two different portfolios are shown in Figures 2 and 3.

The screenshot shows a web page with a dark red header containing navigation links: Home, Resources, IBLE Issues, Research, Reflections, and Feedback. Below the header is a navigation bar with a lightbulb icon, a 'Dictionary' link, an 'English-Arabic Translator' link, and a 'My Notes' link. The main title is 'Internet-Based ESL Activity: Family Life in Different Cultures'. Underneath, there is a 'Contents' section with a bulleted list of activities and a numbered list of tasks. The first task is 'Pre-reading activity: group discussion' with sub-points about describing a typical family in the UAE. The second task is 'Read the text below' with a note to use the online dictionary or translator for definitions.

Figure 2. An example teaching page
(<http://studentweb.usq.edu.au/home/d1131042/iblleless.htm>)

The screenshot shows a web page titled 'Web-based portfolio'. On the left is a 'Menu' with several blue buttons: 'Self-introduction', 'IBLE Research', 'IBLE Lesson Plan', 'Web-based language learning activities/tasks' (which is highlighted), 'Web sites for language teacher development', 'Reflective Journal', and 'Contact me'. The main content area is titled 'Web-based language learning activities/tasks' and contains a paragraph of introductory text. Below this is a section titled 'Hiragana and Katakana practice' with a URL: <http://www.gyrfork.com/japanese/>. This section includes two paragraphs of text describing the activity as a simple exercise for beginners and as a resource for early finishers.

Figure 3. An example resources page
(<http://www.linkzz.com/Resources-activities.tasks.html>)

Conclusion

This chapter has demonstrated that Web-based portfolios can show actual evidence of exploration, reflection and learning achievements online. They can be used as a tool for assessment, which is presented in an electronic format with hyperlinks to multimedia materials. In the context of CALL teacher education, Web-based portfolios can provide teachers with opportunities to foster their professional development with constructivist approaches. By creating their own Web-based portfolios, teachers can improve their knowledge and skills for using the Internet and be more active in online communication, collaboration and reflection. They can also learn themselves how to integrate ICT into their teaching to improve students' learning. Further research on the effective use of Web-based portfolios is needed with a view to including developmental and innovative practice in language teacher education programs.

References

- Brooks, J.G. (2002). *Schooling for life: Reclaiming the essence of learning*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Brooks, J.G., & Brooks, M.G. (1993). *In search of understanding: The case for constructivist classrooms*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Campbell, D. M., Melenyzer, B. J., Nettles, D. H., & Wyman, R. M. (2000). *Portfolio and performance assessment in teacher education*. Needham Heights, MA: Allyn and Bacon.
- Coombe, C., & Barlow, L. (2004). The reflective portfolio: Two case studies from the United Arab Emirates. *English Teaching Forum*, 42(1), 18-23.
- Fosnot, C.T. (Ed.) (1996). *Constructivism: Theory, perspectives, and practice*. New York: Teachers College Press.
- Gathercoal, P., Love, D., Bryde, B., & McKean, G. (2002). On implementing Web-based electronic portfolios. *Educause Quarterly*, 2, 29-37.
- Kaufman, D. (2004). Constructivist issues in language learning and teaching. *Annual Review of Applied Linguistics*, 24, 303-319.

- Klenowski, V. (2002). *Developing portfolios for learning and assessment: Processes and principles*. London: Routledge Falmer.
- Mansvelder-Longayroux, D. D., Beijaard, D., & Verloop, N. (2007). The portfolio as a tool for stimulating reflection by student teachers. *Teaching and Teacher Education, 23*, 47-62.
- McNair, V., & Galanouli, D. (2002). Information and communications technology in teacher education: Can a reflective portfolio enhance reflective practice? *Journal of Information Technology for Teacher Education, 11*(2), 181-196.
- Pearson, J. (2003). Information and communications technologies and teacher education in Australia. *Technology, Pedagogy and Education, 12* (1), 39-58.
- Pelliccione, L., Dixon, K., & Giddings, G. (2005). A pre-service teacher education initiative to enhance reflection through the development of e-portfolios. *Proceedings of the Australasian Society for Computers in Learning in Tertiary Education (ASCILITE) 2005 Conference*, Brisbane, Australia, 527-534.
- Phillips, P. (2008). Professional development as a critical component of continuing teacher quality. *Australian Journal of Teacher Education, 33*(1). Retrieved March 1, 2009, from <http://ajte.education.ecu.edu.au/issues/PDF/331/Phillips.pdf>
- Piaget, J. (1954). *The construction of reality in the child*. New York: Basic Books.
- Piaget, J. (1955). *The language and thought of the child*. New York: Meridian.
- Piaget, J. (1970). *The science of education and the psychology of the child*. New York: Basic Books.
- Pratt, K., Lai, K.-W., & Munro, P. (2001). Professional development for ICT-using teachers. In K.-W. Lai (Ed.), *e-Learning: Teaching and professional development with the Internet* (pp. 21-36). Dunedin: The University of Otago Press.
- Rokita, J. (2005). Using portfolios in language teacher education. In Misztal, M., & Trawiński, M. (Eds.), *Studies in teacher education: Language, literature, and culture* (pp. 26-33). Kraków: Wydawnictwo Naukowe Akademii Pedagogicznej.
- Son, J.-B. (2002). Computers, learners and teachers: Teamwork in the CALL classroom. *English Language Teaching, 14*(2), 239-252.

- Son, J.-B. (2004a). *Internet-based language instruction: Study book*. Toowoomba: Distance Education Centre, University of Southern Queensland.
- Son, J.-B. (2004b). Teacher development in e-learning environments. In J.-B. Son (Ed.), *Computer-assisted language learning: Concepts, contexts and practices* (pp. 107-122). Lincoln, NE: iUniverse.
- Sorin, R. (2004). Webfolio: An online learning community to help link university studies and classroom practice in preservice teacher education. *Australian Journal of Educational Technology*, 20(1), 101-113.
- Trewern, A., & Lai, K.-W. (2001). Online learning: An alternative way of providing professional development for teachers. In K.-W. Lai (Ed.), *e-Learning: Teaching and professional development with the Internet* (pp. 37-55). Dunedin: The University of Otago Press.
- Vygotsky, L.S. (1962). *Thought and language*. Cambridge, MA: MIT Press.
- Vygotsky, L.S. (1978). *Mind in society*. Cambridge, MA: Harvard University Press.