Pre-Service Teachers’ Development of Digital Literacies: 
A Case Study in a Wiki-Based Collaborative Writing Context

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ABSTRACT

Digital literacies are gaining popularity in teacher education over the past decade, but little research has been conducted on the developmental trajectories of pre-service teachers’ digital literacies while digital practices in their daily routines cannot necessarily be transformed into digital literacies in the educational setting. Using a case study methodology, four L2 Chinese pre-service teachers were examined during the spring semester of 2016 when they assisted teaching in a wiki writing classroom. Data was collected through semi-structured interviews and observation diaries. Drawing upon the framework of digital literacies, this article identifies the core components and traces the developmental trajectories of digital literacies in a wiki-based collaborative writing context: attitudes towards technology and application (Thinking), task organization and feedback provision (Doing), modes and genres (Meaning), teacher-student relations (Relating), and roles and responsibilities (Being).

KEYWORDS
Developmental Trajectories, Digital Literacies, Pre-Service Teachers, Wiki-Based Collaborative Writing

INTRODUCTION

Literacy, known as the skills and abilities to read and write, has long been considered an indispensable component in language education. Under the trend of the digital technology revolution, digital literacies emerged in response to digital tools that facilitate interaction between people and the world through the practices of reading, writing and communication (Hafner, Chik & Jones, 2015). In Australia, Britain and the United States, the national education offices have incorporated digital literacies into their curricula and emphasized the importance of digital technology in school education practice (Pullen & Cole, 2010). They have noted that literacy focusing solely on reading and writing has been no longer able to meet social and pedagogical needs, and that digital technology should be incorporated in schooling as a form of mediation.

Digital literacies can benefit both language learners and teacher education (Instefjord & Munthe, 2016). Pre-service teachers, growing up in a digital era, have more access to digital technology and are

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more comfortable with its use, and their own digital literacies are becoming a vital issue in determining what and how they will do in their future teaching practice. According to Raith & Hegelheimer (2010), the application of digital technology has been identified as a basic skill for teacher education, and teachers are expected to embrace relevant technologies and apply them to their literacy teaching practices. However, there are different requirements of digital literacies in and out of educational contexts. Pre-service teachers’ digital practices in everyday life cannot necessarily be transformed into digital literacies in the educational setting. Therefore, there is a need to trace the developmental trajectories of pre-service teachers’ digital literacies by comparing their past learning experiences with current teaching reflections within the digital literacies framework proposed by Jones & Hafner (2012), which serves as the analytic lens to show the complex nature of literacy development.

According to Kirschner et al. (2008), the pedagogical use of digital technology should be embedded in education programs to improve current teaching and develop new approaches. In China, the use of technology to facilitate teaching is also viewed as one of the key requirements for teachers of Chinese to speakers of other languages (TCSOL) (the Office of Chinese Language Council International, 2012; 2015), suggesting that “teachers grasp the basic knowledge needed to operate a computer, understand modern teaching methods and network technology, and apply them to Chinese teaching practice.” Although wiki-based collaborative writing (WCW), as a new approach to language teaching, has been gaining increasing popularity in literacy education, the use of wikis in Chinese writing in Mainland China is only at an early stage (Li et al., 2014). Meanwhile, in the present study, four L2 Chinese pre-service teachers are free of experience in handling a WCW. Therefore, pre-service teachers’ development of digital literacies can be evident when comparing the past digital experience out of educational contexts with their current classroom observation and teaching practice. Adopting a case study approach, this study explores how four pre-service teachers develop their digital literacies through a wiki-based writing class and attempts to answer the following research questions:

1. What are the core components of pre-service teachers’ digital literacies in the WCW context?
2. What developmental trajectories of pre-service teachers’ digital literacies can be traced in a WCW context?

BACKGROUND

Digital Literacies

Digital literacies, according to Dudency et al. (2013), refer to ‘the individual and social skills needed to effectively interpret, manage, share and create meaning in the growing range of digital communication channels’. From this definition, it is evident that digital literacies are meaning-making skills that can be identified and categorized in digital settings (Eshet, 2004; Calvani et al., 2009; Pegrum, 2011). Similarly, Calvani et al. (2009) notes that ‘the competence we are dealing with entails a critical understanding of technologies, a cognitive and cultural appreciation, and in particular the ability to select and manage information, along with relational and ethical awareness’. Taking notice of the differences of pre-service teachers’ digital literacies in and out of educational contexts, Krumsvik (2014) proposes and develops a digital competence model for teachers and teacher educators in a Norwegian context. This model, according to Krumsvik, consists of four core components: basic digital skills, didactic ICT (Information Communications Technology)-competence, learning strategies and digital awareness. In sum, the dimensions above enable us to reflect on different kinds of actions, social relationships and ways of thinking, but they fail to take different kinds of meanings and social identities into account.

A latest definition is from Hafner et al. (2015) that define digital literacies as the practices of reading, writing and communication through digital tools that facilitate interaction between people and
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www.igi-global.com/article/content-rich-versus-content-deficient-video-based-visuals-in-l2-academic-listening-tests/198345?camid=4v1a