

## Chapter 4

# Language Teachers' Perceptions of External and Internal Factors in Their Instructional (Non-) Use of Technology

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### ABSTRACT

*Prior studies (e.g., Li & Walsh, 2011) found that language teachers did not use technology fully despite its possible facilitating function in language teaching. Through a survey and group discussions, this study explores pre-service Chinese-language teachers' perceptions of the internal and external barriers to their instructional technology use. The respondents (N=47) expressed five main types of external barriers: a) lack of technology, b) difficulty in accessing the available technology, c) lack of technical support, d) lack of proper assessment, and e) negative parental attitude. The two main internal barriers identified in this research were a) negative attitude originating from teachers' pedagogical beliefs, and b) lack of technology-related knowledge. The findings of this study should be of practical use in the future design and implementation of professional development aiming at improving language teachers' use of technology in teaching.*

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## **INTRODUCTION**

The history of using technology such as computers, audio and video to facilitate foreign-language learning is not short. As Garrett (1991) noted, technology can “play a major role in foreign language learning and in research on that learning” (p. 95). The advent of new technologies (e.g., multimedia, mobile devices, and the Internet) has brought new opportunities for the facilitation of language learning and instruction in almost all major language areas including grammar, vocabulary, reading, writing, listening and speaking (Levy, 2009). The advantages of using technology in the classroom have also been verified as well. Warschauer and Harley’s work (as cited in Li & Walsh, 2011) found that proper integration of information and communication technology (ICT) was associated with “a more interactive language classroom, motivating learners”, and “authentic language output” (p. 101). Therefore, it is not surprising that there has been an increased emphasis on technology adoption in many national curriculum guidelines, including those for foreign languages (Oxford & June, 2007). The U.S. National Standards in Foreign Language Education Project (1999), for example, listed use of technology as one of the seven essential elements of curricular design. The considerably more recent 21st Century Skills Map for World Languages (ACTFL, 2011) also places particular emphasis on the integration of technology with classroom practices to enhance students’ learning.

Despite this increased emphasis, the literature has shown that technology has not been used to its full potential in language teaching in U.S. (Ravitz, Becker, & Wong, 2000; Arnold, 2007). However, studies discussing *why* there had been such underuse among language teachers have been rare. Most existing research on technology acceptance or adoption mainly focused on teachers regardless of their teaching content (e.g., Ertmer, 1999; Ertmer, Ottenbreit, Sadik, Sendurur, & Sendurur, 2012; Teo, 2011, 2014). Yet more studies on how teachers from a particular academic content area use technology is in need. For an example, it is suggested that future study should look at “sector specific and subject specific barriers” (BECTA, 2004, p. 4). Given the importance of technology integration in language classrooms, and the low technology uptake by language teachers, the present study aims to find out what factors or barriers language teachers perceive as having an influence on their (non-) use of technology in their teaching.

## **LITERATURE REVIEW**

Quite a few studies have touched on the issue of teachers’ low levels of technology integration. One line of research has aimed to identify which aspects of technology-adoption models influence teachers’ intentions to use technology by testing those models among teachers (e.g. Teo, 2011, 2014). Another has attempted to identify specific barriers that may prevent teachers from using technology in the classroom (e.g. Bradley & Russell, 1997; Ertmer, 1999; Ertmer et al., 2012; Veen, 1993). In spite of their seemingly divergent foci, both these lines of enquiry have aimed to explain technology (non-) use from external and internal angles.

### **External Factors**

External factors are those that do not pertain to teachers themselves, but to resource-availability issues such as time, money, support, and training. They have been widely reported to have very substantial effects on teachers’ technology adoption (e.g., Egbert, Paulus, & Nakamichi, 2002; Li, 2014; Li & Walsh, 2011),

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