Chapter 4

# Researching Into the Use of Real–Life Materials in Language Learning Apps:
## A Case Study of the HANZI App for Learning Chinese Characters

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## ABSTRACT

*The study reported in this chapter investigates how mobile language apps facilitate the learning of L2 Chinese, focusing on the use of real-life materials in the design of HANZI – a mobile app specifically developed for this study. Guided by the pedagogy of using authentic materials in language learning and some key design principles of language mobile apps, this chapter explores beginner Chinese learner experiences of mobile-assisted Chinese language learning. It is a qualitative-led case study with multiple datasets including descriptive statistics from 111 survey responses, student focus group discussions, and teacher interviews. The analysis reveals that real-life materials can promote learners' motivation, personalised learning, and social interaction, which improve language proficiency. Such materials should be included in language activities in both digital and print media because they are central to overcoming the challenges of learning Chinese characters.*

## INTRODUCTION

With an increasing number of L2 learners of Chinese worldwide and the fast development of mobile technology to assist the learning of Chinese, researchers have been paying more and more attention to the field of mobile-assisted Chinese language learning (MACLL). It is of particular importance as the learning of Chinese poses significant challenges due to its intrinsic features (e.g. see Kan et al., 2018; Poole & Sung, 2015; Shen, 2005; Sung & Wu, 2011). The well-established main challenges are: (i) the tone production; (ii) lack of connection between the written script and the pronunciation and its consequence of learners having to learn both character form and romanisation form called *Pinyin* at the same time; (iii) large number of characters sharing the same sound combinations although sometimes different in tones; and (iv) irregularity of the number of strokes in each character, large number of radicals (also known as head components) and its various structures (Kan et al., 2018).

To overcome the above challenges, a variety of learning strategies have been adopted by L2 learners of Chinese. There have been some studies investigating character learning strategies as well as studies on how mobile technology can help the learning of Chinese characters, but few studies have examined the connection between language app design principles and language content in the context of beginner Chinese learners. This study aims to fill the gap by answering the following two research questions:

**RQ1**: To what extend does the HANZI[1] app design principles work in terms of using real-life materials?

**RQ2**: How effective is the HANZI app in facilitating the learning of beginners' Chinese?

This study is guided by the pedagogy of using authentic materials in language learning (Éva Illés, 2017) and some key mobile app design principles proposed by Rosell-Aguilar and Kan (2015) and the "Design *for* Learning" principle by Kukulska-Hulme and Traxler (2019). As part of the methodology, the two authors of this chapter used the purposely developed character learning app HANZI to explore effective design principles and to assist the data collection.

In the following section, relevant literature on the following three aspects will be reviewed (i) authentic materials in language learning; (ii) character learning strategies; and (iii) mobile-assisted language learning. The purpose of reviewing these three areas is to explain how they inform the evaluation of the HANZI app and how they underpin the methodology of this study to help answer the above two research questions.

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