

CHAPTER 1 – OVERVIEW OF THE STUDY

Introduction

According to the National Council of State Supervisors for Languages (NCSSFL), twenty-five states currently either require or recommend that students enroll in foreign language courses in high school in order to qualify for graduation, college admission, advanced diplomas, or scholarships (NCSSFL, 2012). The need for competence in a second language is also often cited as a necessary “21st century skill” for graduates entering a job market in a more interconnected, global economy (Kay, 2010; Lemke, 2010). There is a persistent minority of students at the middle and high school levels who experience difficulty acquiring a foreign language, despite a high degree of effort and academic success in other subject areas (DiFino & Lombardino, 2004). While some research suggests that there is a specific disability associated with learning difficulties in foreign language acquisition (Sparks, Ganschow & Pohlman, 1989; Gazaleh, 2011), other studies have contradicted previous hypotheses or changed the focus to the consideration of problems that students encounter in both native and foreign language study (Sparks, 2006). One common factor that appears in much of the research is that many students who are less successful in learning a foreign language in school have deficits in auditory discrimination and oral production of the target language (DiFino & Lombardino; 2004, Palladino, 2008; Sparks, 2006).

The role that exposure to audio and visual media plays in foreign language acquisition is not agreed upon by educational scholars, with some arguing that media are simply vehicles by which to deliver instruction, and therefore not inherently valuable or influential in increasing academic performance apart from their use by a skilled instructor (Clark, 1983, as cited in Chan, Chin, Nagami and Suthiwan, 2011, p. 8). Others consider such resources valuable as part of a

wide variety of ‘comprehensible input’ that teachers provide to learners in order to strengthen their skills in both listening comprehension and speaking with native-like pronunciation, cadence, intonation, and fluidity (Rahmatian, 2011). Modern organizations centered on best professional practices for foreign language instruction, such as the American Council on the Teaching of Foreign Languages (ACTFL), recognize the importance of providing such auditory and visual input through the use of new technologies and formats, including texts both in oral and video format, the Internet, podcasts, digital media, and mobile phones (ACTFL, 2013, p.20).

Study Overview

The proposed mixed-method study with middle and high school teachers of foreign languages first seeks to understand the current practices of teachers in providing auditory input for students by anonymously polling a large ($N > 30$) group of practicing teachers on their pedagogical use of media resources. The next phase of the study includes face-to-face interviews with 6-10 practicing teachers to explore similar questions about media creation and distribution for use with students. At the conclusion of the first interview the teachers will be trained to create and distribute custom audio samples by the use of a quick response (QR) code and the Internet site <http://qrvoice.net> (see Figure 1). A follow-up interview after the teachers have tried one of three possible activities that use the QR code audio samples and mobile technology in the classroom will center on the teachers’ facility with creating the materials and their perceptions of the usefulness of this delivery method.



Figure 1: QRVoice.net interface with QR code

Research Questions

The following proposed research questions will be addressed in the study and analysis:

1. How do foreign language teachers currently provide auditory input in the target language to their learners?
2. What are the barriers that foreign language teachers face when creating and distributing customized audio examples in the target language via technology?
3. Are QR codes an efficient and practical way (in terms of technical know-how, time needed to create materials, and student access) to deliver and access audio support in face-to-face foreign language learning contexts?

Research Gap and Significance of the Study

Modern textbooks used in public secondary school settings often include multi-media resources either in the form of physical materials such as compact discs (CDs) or digital versatile discs (DVDs). Others include web-based resources that students access via an electronic version of the text or by entering an Internet access on a web browser. It is unclear, however, as to how and how often foreign language teachers are using these resources for instructional purposes in the classroom, as reference materials, or as part of assignments required for homework. A recent search for research related to this topic yielded few results; the one study that specifically centered on the use of multi-media textbook aids investigated university students' – rather than instructors' - perceptions of their usefulness for learning (Mathew & Alidmat, 2013). Therefore the first task in the proposed study is to investigate current instructional practices of foreign language teachers related to the use of such multi-media resources by polling a large group of practitioners on this topic.

Foreign language teachers who do not have access to such materials, or who choose not to use them because of the poor quality or misalignment with the course learning objectives, may seek to create and distribute custom audio and visual materials to their students. New technologies such as digital voice recorders and video recorders on mobile devices such as tablets and 'smartphones' have made creating custom media samples easier, but still require time and some level of technical expertise to master. The additional barriers of hosting and distributing the custom media files to students remain, even for teachers who manage to successfully create these resources. The proposed study includes questions both in the online survey and personal interviews to learn more about the interest and abilities of middle and high school foreign language teachers to create and distribute media resources.

Lastly, some educational theorists (Mousavi, Low & Sweller, 1995) and leaders in the field of multi-media design for educational purposes (Clark & Mayer, 2008) argue that there are benefits to presenting audio materials separately from visual (i.e. still images and video) resources in order to decrease the ‘cognitive load’ on the visual channel through which learners absorb new information. To explore teachers’ perceptions about the importance and effectiveness of audio-only supports that they provide to foreign language learners, there are questions about this topic in both the survey and the interviews. Additionally the research includes a training for the participating teachers on the use of a possible technology tool to create and to allow students access to audio-only media support.

While there have been a number of studies in recent years centered on mobile support for language learning, most have been situated at institutions of higher learning, center on learning English as a foreign or second language, and involve specifically designed mobile applications (Wu, 2015; Aqib & Asim, 2012; Woodcock, Middleton, & Nortcliffe, 2012; Nah, White & Sussex, 2008). Although QR codes have been successfully implemented in the business and marketing realms since the early 1990’s (Shin, Jung, & Chang, 2012), they are a relatively new pedagogical tool, so there are very few studies regarding their use to help students access academic support materials. Some educators have studied the use of specific applications that are designed to be accessed via QR code (Tsung, Tan, & Chu, 2010; Kamarainen, et al., 2013), and others have written about the potential for using the transmedia approach that allows for connection to audio supports, but have not studied the implementation of this approach (Law & So, 2010; Leahy, 2013; Crompton, LaFrance & van ‘t Hooft, 2012).

Uncovering the current state of instructional practice with multi-media resources - and in particular focusing on the use, creation, and distribution of audio resources – will inform the

practice of practicing and pre-service teachers of foreign language at all levels and modes (face-to-face, online) of instruction as they explore ways to create and distribute audio media support to their students.