HOKKAIDO UNIVERSITY

Title	Development of the Mobile Learning System for Local Tour Guide Training in Chinese
Author(s)	Sugie, Satoko
Description	The 25th International Conference on Collaboration Technologies and Social Computing (CollabTech 2019), Kyoto, Japan. September, 4-6, 2019
Relation	Poster Proceedings : The 25th International Conference on Collaboration Technologies and Social Computing (CollabTech 2019)
Issue Date	2019-09
Doc URL	https://hdl.handle.net/2115/75631
Type	conference paper
File Information	Sugie_2019_Poster_Proceedings.pdf

Hokkaido University Collection of Scholarly and Academic Papers : HUSCAP

Development of the Mobile Learning System for Local Tour Guide Training in Chinese

Satoko Sugie[1][0000-0001-6087-6432]

[1] Hokkaido University, Nishi 8, Kita 17, Kita-ku, Sapporo, Hokkaido 060-0827, Japan
ssugie@imc.hokudai.ac.jp

Abstract. In Hokkaido, over 60% of the inbound visitors come from Chinese speaking regions. Therefore, the tourism industry needs Chinese rather than English as a means of communication. That is why the development of multilingual human resources is indispensable. However, a systematic foreign language teaching program has not been developed yet. The objective of this study is to develop a mobile learning system for the Chinese guide interpreter training. This paper reports the details of the process of development, platform construction with LMS, contents design, development environment, and primary evaluation by National Government Licensed Guide Interpreters.

Keywords: Mobile Learning, e-learning, Educational Material Development, Tourism Education, Chinese Language Teaching.

1 Introduction

As an initiative of the government, tourism promotion and the environment for welcoming inbound tourists are being upgraded. The development of multilingual human resources with intercultural competency through tourism and foreign language education is highly required. The National Government Licensed Guide Interpreter system has changed in 2018 in a way that allows anyone who can speak a foreign language to work as a paid guide interpreter without a license. That is why there is a great need to ensure the quality of volunteer guides and service industry workers. In the field of this study, Hokkaido, the number of inbound tourists has continued to grow for six years straight, and in 2017 it exceeded 2.79 million of which visitors from Chinese speaking regions account for over 60% (Ministry of Hokkaido Economy and Tourism Bureau, 2017). For this reason, we developed a mobile learning system aimed at the training of Chinese guide interpreters in Hokkaido.

2 Literature review

Topics such as the curriculum design of tourism faculties and collaboration between the industry and the academia have been discussed in the field of tourism education (Yajima, 2013; Negi & Orito, 2015). These studies suggest the inconsistency between

the needs of the industry and finding employment opportunities as well as the unbalanced quality of basic education and vocational training. On the other hand, various mobile language environments for Chinese language learning have been developed (Yuyama, Shinozuka and Yamamoto, 2019; Kan and Ito,2018; Wu, Kato and Yang, 2012). However, in most of the previous studies, the learning goals were set based on the traditional pedagogy of Chinese for General Purposes (CGP) to enhance the four basic skills of language learning. It can be argued that the social needs of multilingual human resource development require a combination of vocational training and language learning, i.e. Chinese for Specific Purposes (CSP). In order to respond to the specific needs of the tourism industry, we have developed a mobile learning platform. Based on the practical experiences of the Chinese licensed guides, we have classified the workflows of guide and concierge services, as well as enhanced the training of oral communication skills. This study will contribute to the integration of vocational training and Chinese language teaching, as well as the promotion of an online independent learning environment. It is also expected to enrich the learning environment for lifelong learning of senior volunteer guides.

3 Development Environment

The whole process of the system development can be summarized as follows.

1. **Construction of the mobile learning platform**. Taking cost effectiveness, convenience of learning, development and maintenance into consideration, we used the open source WordPress LMS plugin (LifterLMS). The page design, quizzes, assignment sending/receiving and evaluation functions were required.
2. **Classification of the communication scenes between tourists and the guide interpreters**. The course topics were made to match the flows of guide and concierge services. The learning course consisted of; (1) tutorial, (2) meeting at the airport, (3) public transportation, (4) hotel check-in, (5) sightseeing spots (Okurayama and Sapporo Olympic museum), (6) cuisine, (7) shopping and souvenirs, (8) hotel check-out and (9) sending off at the airport.
3. **Creation of scenarios consisting of dialogues between tourists and the guide interpreters**. Each course topic had multiple dialogues and Q&As both in Chinese and Japanese.
4. **Creation of quizzes and Q&As focusing on listening and speaking skills training**. The exercises and Q&As were specially designed for each video material section. The Japanese and Chinese interpretation exercises and Q&As used excerpts from the videos. In addition, an evaluation questionnaire created with Google Forms was added to the end of each course. Learners were asked to answer the five-grade evaluation questionnaire as well as some open-ended questions. The evaluation criteria included; (1) page design, (2) leading goals, (3) contents, (4) evaluation of learning achievements, (5) communication between learners and instructors, (6) privacy protection, and (7) comprehensive evaluation.

5. **Filming of the movies on each topic**. In general, original content such as films of the on-site guide interpretation were used. Some facilities such as airports, public transportation and sightseeing spots required the permission of filming. **Recording of the audio files used for dialogues and exercises**. Clear audio had to be recorded separately as the sounds recorded during the filming process included various noises inappropriate for educational materials.
6. **Editing of videos and sounds**. Each clip should be less than 5 minutes in order to prevent learners from feeling distracted.
7. **Implementing of materials and exercises in the system**. The platform was constructed with WordPress, LifterLMS and Loco Translate.
8. **Debugging of the teachers'/learners' functions.** Checking all the functions such as sign-in, watching videos, listening to audio files, doing exercises, sending and receiving assignments, as well as scoring and grading.
9. **Testing of the trial version.** Conducting the primary evaluation.

4 Primary Evaluation

With the cooperation of the National Government Licensed Guide Interpreters, we conducted the primary evaluation of the system. There were seven Japanese participants who were advanced-level learners. They tested the system *e-Learning de Hokkaido×Chinese Guide* (http://chugokugokobo.sakura.ne.jp/e-daoyou/) (see Fig. 1) and answered the open-ended evaluation questionnaire.

Fig. 1. Top Page and Video Material Page of the Mobile Learning System

After studying the tutorial at first, the participants chose two different courses. They used their own mobile devices such as Windows PC, Android tablet PC, Android smartphone and iPhone. The network used was the University Wi-Fi or 4G band. Each participant wrote free comments, requests and opinions for improvement. The participants gave their opinions about functional errors and proposed adjustments of the

materials. The differences between the PC and smartphone environments were discovered and errors were fixed to meet the evaluators' requests.

5 Conclusion and Future Challenges

In this study, we developed the mobile learning system for Chinese local guide interpretation training. As the study is ongoing, we described the process of development, the platform construction with WordPress and LMS, the design of the courses and materials, the environment and summarized the primary evaluation. As a result, the following improvements were deemed necessary: (1) The Q&As and exercises needed more educational hints. (2) The quality of sound in the materials must be ensured as they may affect the learners' concentration. (3) The words and phrases used in the materials should be included in the vocabulary list as much as possible. (4) The instructors should explain the learners that the pronunciation in the materials is not always the same as in the lexical definition. (5) The default notification function should be adapted to suit the learners' tastes. (6) The videos explaining sightseeing spots and facilities are sometimes unnecessary and they affect the efficiency of the training. (7) As Japanese students prefer reading and writing, the instructors need to teach them to also practice repeating and shadowing.

The future challenge is the actual usage and evaluation of the system in the flipped class. We are planning to conduct cooperative learning with Japanese and Chinese students in the guide-interpretation training class. The improvement of the efficiency of the flipped class should be considered based on the experiences gained in actual educational practice.

References

1. Kan, M., Ito, A. Comparison of effectiveness of mobile application to improve Chinese tone pronunciation ability. IEICE technical report 117(519), 57-62 (2018)
2. Ministry of Hokkaido economy and tourism bureau. The transition of the number for the foreigner who visited Hokkaido. http://www.pref.hokkaido.lg.jp/kz/kkd/kankoutoukei_updated.htm last accessed 2019/4/3
3. Negi, Y., Aoki, A., and Orito, H. Study of the work-integrated education of tourism in Japan through comparison of the tourism-related universities in Japan and the USA. The journal of Tamagawa University College of Tourism and Hospitality (1), 63-80(2013)
4. Wu, J., Kato, T., and Yang, D. Development of a Smart Classroom for Chinese Language Learning using Smartphone&Tablet(Paper on Educational System Development,<Special Issue>Improvement of Higher Education and Faculty Development). Japan Society for Educational Technology 36(3), 239-250, (2012).
5. Yajima, T.: A Study of the Partnership for Education between Leading Travel Companies and Faculties or Departments of Tourism in Higher Education. JAFIT international tourism review (20), 55-61 (2013).
6. Yuyama, Y., Shinozuka, M., and Yamamoto, K. Development and trial of Chinese courier learning application: The quiz application "Little You" using the friends feature of LINE BOT. IEICE technical report 118(516), 7-12 (2019).