Chapter 6
The Analysis of Student Survey and Interview Results

ABSTRACT
This chapter presents the statistical results and analysis of survey answers and the interview results from four participating schools from September 2010 to July 2012. The findings, based on descriptive statistics, T-tests, and qualitative content analysis, demonstrate that the Web-based intelligent English instruction system CSIEC is easy to use, interesting, and motivating, and helps the students with their vocabulary mastery, listening comprehension, and other learned knowledge, and can improve the students’ learning efficiency and exam scores. The students hope to continue to use it in future English learning and recommend it to others. The most impressive functions of the blended learning for the students include human-computer interaction, instant feedback, and vocabulary learning. The findings are consistent with the results and findings in a large amount of previous literature related with the students’ perception toward computer application in education or blended learning approach, and especially in language education.

INTRODUCTION
The author’s research team conducted online surveys at the end of almost every experiment term or school year in order to investigate the attitude and feeling toward the blended learning of the students in four experiment high schools. Usually the survey contained the questions about students’ personal information, attitude and feeling, comments and suggestions. Certainly some schools had special questions to be oriented to their specialty. Besides the surveys, the team also conducted interviews with several students from the experiment classes in the middle schools.

Some researchers suggested concepts to measure the attitude and feeling of the users toward new technologies. Davis (1986) proposed the concept of users’ percipience, including perceived usefulness (PU) and perceived ease of use (PEOU). This concept has been widely used to predict users’ attitudes towards information technology. PU and PEOU can explain users’ attitudes towards the technology and this study attempts to explore students’ perception of the proposed system. Moreover, Woszczynski, Roth, and Segars (2002) developed an integrated theory of playfulness in computer interactions and revealed that playfulness has an important role in enhancing users’
acceptance perspective, including attitude and intended usage. Interestingly, these results also suggested a significant interaction effect between playfulness and performance in learning activities with computers (Potosky, 2002). Therefore, in this study a five-dimensional questionnaire was designed and included five focal areas: (1) ease of use of the system; (2) usefulness of the system; (3) playfulness of the activities; (4) usefulness of the activities and (5) intention to use. Besides the five areas, personal demographical information including the age, gender, computer usage experience and blended learning experience and so on is also put at the beginning of the survey.

This chapter presents the statistical analysis of survey answers from the students and the interview results with the students according to the sequence of participating date of the schools. Quantitative approach like independent sample T-test (Haze-winkel, 2001; Zhang, 2009) is used to analyze the survey answers, and qualitative approach like content analysis is used to analyze the interview results and the answers to open questions in the survey. This chapter will review the analysis of survey results and interview results that were collected in first term of grade three, J. Junior High School, from September 2010 to January 2011 and introduced in the previous work of the research team (Jia, Chen, Ding, & Ruan, 2012) in the first section, present the findings from all the other school terms and other schools in the subsequent sections, and summarize the overall findings at the end.

FIRST TERM OF GRADE THREE, J. JUNIOR HIGH SCHOOL, FROM SEPTEMBER 2010 TO JANUARY 2011

Survey Results in January 2011

At the end of January 2011, in the last school hour in the experiment term of J. Junior High School, the students in the experiment class were asked to fill in the online questionnaire. 45 complete answers were collected from 47 students, while the other two answers were not complete. Therefore the valid survey respondents count 45.

The survey comprised four parts: personal information, feeling and attitude, the improvement of English learning, suggestions and comments. The students’ answers to the four parts in details are analyzed in the following subsections.

Personal Information

In the personal information part, the first two questions are asked about the basic data of the students: age and gender. Then three questions are asked about their experience of participating in blended-learning and computer knowledge:

- “How many English classes with blended learning have you participated in?”
- “How many non-English classes with blended learning have you participated in?”
- “What about your computer level? Novice, medium, or expert.”

According to the answers, the students were aged from 13 to 15 with the mean age 14.4. Among them 22 (48.9%) are boys, and 23 (51.1%) are girls. For the previous experience with blended learning in English study, 11 students (23.4%) had taken part in one English course with blended learning, one student had taken part in more than one English course with blended learning, and the others (73.3%) had not taken part in any one. For the previous experience with blended learning in other subjects, eight students (17.8%) had taken part in one course with blended learning, two students had taken part in more than one English course with blended learning, and the others (77.3%) had not taken part in any one. For the previous experience with blended learning in other subjects, eight students (17.8%) had taken part in one course with blended learning, two students had taken part in more than one English course with blended learning, and the others (77.3%) had not taken part in any one. Regarding computer knowledge and skills levels, 16 (35.6%) were novices, 23 (51.1%) were medium, and the other 6 (13.3%) were skilled experts.