Taiwanese Freshmen's Listening Strategies in Watching an Interactive CD-ROM

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ABSTRACT

This study investigates Taiwanese freshmen's listening strategies while watching an interactive CD-ROM for language learning. The four research questions included: (1) What strategies did the students frequently use while watching the CD-ROM? (2) Were there significant differences in listening strategies between more-proficient and less-proficient EFL listeners while they watched the CD-ROM? (3) What were the strengths and weaknesses of using the CD-ROM as an English learning tool? (4) What attitudes did the students exhibit toward using the CD-ROM as an English learning tool?

The subjects were 102 college freshmen, specifically 102 non-English majors at a university in central Taiwan. The instruments adopted in the study consisted of a listening comprehension test, an interactive CD-ROM, a questionnaire, and interviews. After watching a CD-ROM, the subjects took a listening comprehension test and completed a questionnaire about listening strategies. Students' responses to the CD-ROM were categorized into different types of listening strategies as reflected in the studies of Oxford (1990) and Teng (1996).

In addition, ten students were chosen and interviewed individually to triangulate the quantitative results and to yield meaningful information for the study. In brief, the study (1) provides empirical descriptions of listening strategies that Taiwanese freshmen used while watching an interactive CD-ROM, and (2) contains instructional implications for teaching listening comprehension.

Keywords: CALL, listening strategy, interactive CD-ROMs, learning tools/attitudes, Taiwanese freshmen.

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Ⅰ. Introduction

Listening skill plays a significant role in communication and is considered one of the fundamental skills in learning English (Brindley, 1998; Brown & Yule, 1983; Faerch & Kasper, 1986; Harmer, 1998; Shrum and Glisan, 2000; Vandergrift, 2002). Although there is no complete understanding of the listening process and there are various definitions of listening skill, the development of listening skills is always a major concern in language education (Buck, 1992; Rubin, 1994; Wolvin & Coakley, 1988).

Over the past decades, audio/video cassettes have been seen as a major tool for English instruction in such settings as classrooms and language labs. However, as the application of technology in language education has become more and more popular and mature, the issue of CALL (Computer-Assisted Language Learning) has been continuously discussed and investigated. Recent advances in computer technology allow the delivery of digital video and audio in the same interface as written text. Such potential has been adapted to the development of listening skills on EFL CD-ROM, an interactive form of language learning that provides listening tasks, language input and feedback on task success via the computer screen. Also, the use of videos as visual supports has been proved to be effective in facilitating listening comprehension (Baltova, 1994; Graber, 1990; Mueller, 1980; Rubin, 1995; Secules et al., 1992; Seghayer, 2001; Su, 1994).

As a result of the rapid changes in technology that affect the language learning and teaching environment in Taiwan, more and more universities, especially in language-related departments, have been applying technology to language teaching and learning for better language achievements. Although there have been many studies conducted in Taiwan in terms of learning strategy, most of them are concerned with reading. Less research effort has been devoted to listening strategies, especially that used with interactive CD-ROMs. Thus, the current study (1) analyzes students' strategies used while watching an English learning CD-ROM and (2) offers implications for teaching listening comprehension through the use of interactive CD-ROMs.

Ⅱ. Literature Review

As technology is getting more and more mature in the 21st century, it has been considered indispensable in facilitating the language learning process. This is the reason that many researchers view computers as a great tool in English teaching and learning because computers can offer students many opportunities for better English with specific instruction (Bork, 1985; Laboratory for Comparative Human Cognition, 1989; Papert, 1980; Ragosta, 1983).

Listening activities implemented in the classroom are usually accompanied by audio/video cassettes or supplementary handouts. However, with the advances in computer technology, VCDs, DVDs, and CD-ROMs have been used to develop students' listening skills. For example, multimedia, i.e. a combination of media such as audio and visual aids, have been claimed to be helpful in motivating students to enhance their listening comprehension (Edasawa, Takeuchi, & Nishizaki, 1990; Teng, 1998; Ur, 1984; Willis, 1981; Winn, 1991).

Studies have suggested that the use of multimedia, including CD-ROMs, DVDs, VCDs, for L2 listening comprehension is encouraging (Baltova, 1994; Brett, 1997; Chang, 1996; Cronin, 1993; Jones, 2001). For example, visual and body languages of the speakers not only facilitate students' understanding but also provide more clues for them while listening. Moreover, multimedia programs can be beneficial to less-proficient learners to a higher extent than to high-proficient learners. The features of multimedia can also facilitate learners' higher levels of comprehension and recall of the texts while listening in the multimedia environment. Finally, learners, with the aid of multimedia, gain a better understanding of what they are listening to, as compared to the traditional listening environment. As a result, this study offers descriptions of EFL students' listening strategies used in the process of English learning with the aid of multimedia resources.

Ⅲ. Methodology

1. Subjects

Subjects were 102 college freshmen; all were non-English majors from a university in central Taiwan. These students started to learn English after they had entered junior high school. Moreover, most of the subjects had the experience of reading English learning magazines that also included attached interactive CD-ROMs. Therefore, the subjects had no problem in using computers, setting up CD-ROMs, installing and operating related software, etc.

2. Instruments

Four instruments were adopted: (1) the General English Proficiency Test (GEPT) for intermediate level; (2) an interactive CD-ROM; (3) a questionnaire; and (4) interviews.

3. General English Proficiency Test (GEPT)

The simulated intermediate-level test of the GEPT was intended to identify the proficiency level of the subjects. The time limit of the listening test was about 30 minutes. The test was conducted in a

language lab at the university. The total average score of 102 subjects was 56.72. With the grade of 57 used as the mid-range score, the subjects were divided into two groups with 51 more-proficient listeners and 51 less-proficient listeners.

4. Interactive CD-ROM

The CD-ROM used in this study was attached in the magazine *CNN Interactive English Magazine* published by the Live ABC TESOL Association. A listening passage (see Table 1) from the July 2002 issue was selected for this study. Two raters, an American professor and a Taiwanese professor, read the selected passage and considered it appropriate for evaluating the EFL subjects' listening comprehension in terms of topic, speed, length, speaker's tone, and the visual quality of the interactive CD-ROM. The listening passage entitled "The Indian Railway Still Chugging after 150 Years" lasted two minutes and four seconds, and the speech rate was 144 wpm which, according to Tauroza and Allison (1990), was defined as being moderately slow.

Table 1: Description of the Listening Passage

Listening Passage	Duration (Min, Sec)	Number of words	Words per minute
The Indian Railway Still Chugging after 150 Years	2'04	293	144

5. Questionnaire

In order to examine the listening strategies that subjects adopted while practicing listening comprehension through the interactive CD-ROM, a questionnaire was employed in this study. The questionnaire was based on previous studies, including Oxford (1990), Teng (1996) and Cohen & Chi (2002). The subjects were asked 30 Likert-scaled questions and they responded to the statements by indicating whether they "Always," "Often," "Sometimes," "Seldom," and "Never" agree with each statement. "Always" was assigned a weight of 5 points, while "Never" received a score of 1. The results of the listening strategies were further categorized according to studies conducted by Oxford (1990) and Teng (1996) to identify five different strategy types, including "memory," "cognitive," "compensation," "metacognitive," and "affective" strategies adopted by the subjects.

6. Interview

The interview was conducted during the experiment because use of the interview is believed to be another effective way to explore subjects' additional personal opinions during the experiment. Ten interviewees were chosen from the subjects. Five were from the more-proficient group and five from the less-proficient group.

7. Procedures

Before the experiment began, the subjects watched the interactive CD-ROM for the training section. The researchers reminded the subjects of what they should do and notice. When the experiment began, the subjects watched the passage shown on the interactive CD-ROM two times. Then the subjects were asked to take a listening comprehension test. After the test was finished, the subjects were asked to complete the listening strategy questionnaire and participate in an interview to answer additional questions.

The interview was audio-taped for further analysis. Moreover, during the listening process in the experiment, subjects were allowed to take notes or write down certain vocabulary words or phrases on paper. However, to ensure standardized procedures and validity across the experiment, the participants were not allowed to ask further questions about the passage or what they had heard while watching the interactive CD-ROM.

8. Data Analysis

The data used in the present study were analyzed quantitatively and qualitatively. The quantitative analysis included the listening comprehension test and listening strategy questionnaire while the qualitative analysis was the interview transcription.

The quantitative data analyzed in the study were computed using Microsoft Office Excel 2003 and SPSS 12.0 (Statistical Packages for the Social Sciences). The SPSS software was used to calculate the t-test of independent samples, frequencies, means, and percentage of the responses from the subjects on the listening strategy questionnaire. For the qualitative data, all the audiotapes of the interview were transcribed for further analysis. The transcriptions were made carefully in order to investigate the listening strategies that the subjects used. All responses were studied, listed, and classified to serve as a source of information to interpret the results for the current study.

Ⅳ. Results

1. Results of the Listening Strategies Used by the Subjects

In this section, examples of the 30 Likert-scaled questions on the questionnaire are presented below; Table 2 lists three listening strategies that the subjects used most. According to the results on this table, 74 (72.5%) out of the 102

subjects answered "I will try to listen for the words and phrases I have learned," when asked which was the most often used strategy. Tables 2-4 show the results of listening strategies used by these 102 college freshmen.

Table 3 indicates the results of the listening strategies least often used by the 102 subjects. It shows that 77 (75.5%) out of the 102 subjects answered "I will briefly write down what the speaker said," when asked which was the strategy least often used by the subjects.

Table 2: Listening Strategies Most Often Used bySubjects

Item	N	F (%)	Rank
18	102	74 (72.5%)	1
11	102	65 (63.7%)	2
15	102	65 (63.7%)	2

F: Frequent ("Often" (4) / "Always" (5))

Table 3: Listening Strategies Least Often Used by Subjects

Item	N	I (%)	Rank
1	102	77 (75.5%)	1
5	102	61 (59.8%)	2
23	102	56 (54.9%)	3

I: Infrequent ("Never" (1) / "Seldom" (2))

In order to identify different strategies used by the 102 subjects, the total 30 Likert-scaled listening strategies were further categorized into the strategy groups proposed by Oxford (1990) and Teng (1996). Table 4 shows that the subjects used "compensation" listening strategies most (mean=3.45), followed by "memory" listening strategies (mean=3.25), "metacognitive" listening strategies (mean=3.17), and "cognitive" listening strategies (mean=3.02). "Affective" listening strategies (mean=2.98) were the least often used by the subjects.

Table 4: Means of Strategy Group Categorizations of 102 Subjects

Strategy group	Total Means	Rank
Affective Strategies	2.98	5
Cognitive Strategies	3.02	4
Compensation Strategies	3.45	1
Memory Strategies	3.25	2
Metacognitive Strategies	3.17	3

2. Results of the Listening Strategy Used in Terms of Listening Proficiency

Tables 5-7 present the results of listening strategies used by more- and less-proficient listeners.

Table 5 displays the listening strategies most often used by 51 more- and 51 less- proficient listeners. Forty-one (80.40%) of the 51 more-proficient listeners answered "I will try to understand the content by the clues and vocabulary I have heard (item 15)," when asked which was the most often used strategy. On the other hand, 33 (64.7%) of the 51 less-proficient listeners answered "I will try to listen for the words and phrases I have learned (item 18)," when asked which was the most often used strategy.

Table 5: Listening Strategies Most Often Used by More- & Less- Proficient Listeners

More-proficient Listeners			Less-proficient Listeners		
Item	F (%)	Rank	Item	F (%)	Rank
15	41 (80.4%)	1	18	33 (64.7%)	1
18	41 (80.4%)	1	8	30 (58.8%)	2
20	37 (72.5%)	3	11	29 (56.9%)	3

F: Frequent ("Often" (4) / "Always" (5))

Table 6 indicates the results of the listening strategies least often used by 51 more- and 51 less-proficient listeners. It further shows that 35 (68.6%) of the 51 more-proficient listeners answered "I will briefly write down what the speaker said (item 1)." Also, 42 (82.4%) of the 51 less-proficient subjects answered "I will briefly write down what the speaker said (item 1)," when asked which was the least often used strategy.

Table 6: Listening Strategies Least Often Used by More- & Less- Proficient Listeners

More-proficient Listeners			Less-proficient Listeners		
Item	I (%)	Rank	Item	I (%)	Rank
1	35 (68.6%)	1	1	42 (82.4%)	1
5	27 (52.9%)	2	5	34 (66.7%)	2
23	27 (52.9%)	2	23	29 (56.9%)	3

I: Infrequent ("Never" (1) / "Seldom" (2))

As to the t-test results, Table 7 reveals that more-proficient listeners adopted the five strategy groups, especially memory strategy, more frequently than did less-proficient listeners when watching the interactive CD-ROM. There were also significant differences between more- and less-proficient listeners for each strategy group categorization. Table 7 further shows that both more- and less-proficient listeners adopted "compensation" listening strategies most. But more-proficient listeners adopted fewest "affective" strategies while less-proficient listeners adopted fewest "cognitive" strategies.

Table 7: T-test Results of the Strategy Group Categorization[1]

SG	More-proficient Listeners			Less-proficient Listeners			T-test
	Mean	S.D.	Rank	Mean	S.D	Rank	
A	3.10	0.85	5	2.86	1.06	4	6.58**
B	3.22	0.56	4	2.81	0.44	5	7.76**
C	3.57	0.27	1	3.32	0.19	1	9.1**
D	3.42	0.11	2	3.07	0.12	2	14.34**
E	3.32	0.47	3	3.02	0.41	3	7.96**

3. Results of the Subjects' Responses to the Interview

Ten students were purposefully and equally chosen for the interview (five from the more-proficient listeners and five from the less-proficient listeners). The interviewees were interviewed individually at a language lab at the university. They were asked to express their opinions toward the interview questions. Each interview was audio-taped. The transcriptions of the 10 interviews were transcribed, analyzed, and categorized for the current study.

4. Question 1: Why do you choose interactive CD-ROMs as a tool for learning English listening?

For this question, 8 out of the 10 interviewees (three more-proficient listeners and five less-proficient listeners) pointed out that the reason why they chose the CD-ROM as a tool for learning English was the requirement by their teachers. They mentioned that their teachers in high school asked them to buy the magazines, and sometimes the articles in the magazines would become a part of the test.

However, one more-proficient listener said that she had bought a copy of a magazine with a CD-ROM attached on her own because she had heard from her friends about the functions and benefits of CD-ROMs. Features of CD-ROMs such as animation and music were engaging and motivating to her. She then started to buy the magazine regularly and study it very often. Another more-proficient listener interviewed indicated that someone sent her a copy of the magazine with a CD-ROM attached. She found the CD-ROM stimulating to learn, and then she started to buy and use the magazine every month to improve her English.

5. Question 2: For improving English listening,

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[1] SG stands for strategy group; A: affective strategies; B: cognitive strategies, C: compensation strategies; D: memory strategies; E: metacognitive strategies. In addition, **$p<.001$; number of more-proficient listeners=51; number of less-proficient listeners=51.

what are the main differences between interactive CD-ROMs and traditional learning media, such as cassettes and CDs?

The interviewees thought that there were many differences between interactive CD-ROMs and traditional learning media, such as cassettes and CDs. For example, three interviewees (two more-proficient and one less-proficient listener) expressed that it was time-consuming and inconvenient to use traditional learning media like cassettes or tapes. Whenever they would like to repeat or retrieve the listening passages they had just heard, it took a lot of time. Sometimes, it would be very difficult to get to the right track for the passage they planned to listen to. Because CD-ROMs are installed and operated on the computer, learners can directly click on the icon for the passage which they would like to read and listen to immediately without wasting time.

Comparing traditional learning media with interactive CD-ROMs, four interviewees (two more-proficient and two less-proficient listeners) suggested that cassettes, tapes, or CDs easily made them bored. Whenever they learned English from cassettes, tapes, or CDs, they could only "listen" instead of "watching and listening" at the same time, as with the interactive CD-ROMs. Thus, with traditional learning media it would be easier for them to feel bored, sleepy, and even frustrated while listening to unfamiliar listening passages. Three interviewees (one more-proficient and two less-proficient listeners) said that the subtitles and translations of the passages on the interactive CD-ROMs were functions that traditional media didn't have. Learners could see subtitles of either English passages or Chinese translation for the passages on the computer screen instead of reading the textbook.

6. Question 3: What are the advantages and disadvantages of using interactive CD-ROMs to enhance your listening ability?

As to the advantages of using interactive CD-ROMs to enhance listening ability, all ten interviewees agreed that interactive CD-ROMs were more helpful than traditional learning media. All interviewees suggested that the "visual support" on the interactive CD-ROM helped them considerably while learning through listening. The visual supports, plots, music, and pictures on the CD-ROM did not make them bored, sleepy, nervous or easily frustrated. The functions on the CD-ROM would help learners become interested in and concentrate on their learning. Interviewees further mentioned that learning English by watching and listening to the CD-ROM was like watching TV—engaging and stimulating. Learners would be motivated to improve their English through CD-ROMs during their free time or even to listen to the passages many times because these passages were interesting.

However, with regard to the disadvantages of using interactive CD-ROMs for improving English listening, one interviewee (a more-proficient listener) admitted that learning English through a CD-ROM was like learning English with the computer instead of learning with teachers at school. If she made any mistakes or had any questions, the computers could not help her to solve the problems she encountered. If learners try to improve their English only through computers, they may not be aware of or identify their mistakes. Another interviewee who was a more-proficient listener mentioned that learning English through the CD-ROM format would be very effective. However, it would require certain computer equipment to watch interactive media formats. For some students who do not have computers, this would be the biggest problem in learning English on interactive CD-ROMs.

7. Question 4:　Do you think English teachers should teach students effective listening strategies and skills in classes? And why?

Ten interviewees all suggested that English teachers should teach students effective listening strategies and skills in their class. The students felt that it would be a great help for teachers to implement effective instruction of listening strategies. If students can be equipped with more listening strategies and skills, such as language usage specific to conversation, speech rate, keywords, and guided listening, they can improve their listening comprehension during the learning process.

Two interviewees, one more-proficient and one less-proficient student, pointed out that effective instruction in listening strategies by teachers can help students. They further indicated that it would greatly help less-proficient students to comprehend more if they knew listening strategies and what to listen for. Otherwise, those less-proficient listeners would never make progress in their listening ability.

Ⅴ. Discussion and Conclusion

1. What Strategies Did the Students Frequently Use While Watching the CD-ROM?

The first research question aims mainly to investigate the listening strategies used by EFL students while watching English-learning programs on the interactive CD-ROM. It was found that 72.5% subjects answered "I will try to listen for the words and phrases I have learned", when asked which was the most often used strategy. Findings also indicate that, in order to understand the listening passages, listeners still paid attention to bottom-up processing and relied on the meaning of words, phrases, and details while listening. Moreover, the results of the study are consistent with previous findings that the combination of videos, sound, pictures, animation

and texts, i.e. multimedia technology, is useful in enhancing students' listening comprehension (Brown, 1990; Edasawa, Takeuchi & Nishizaki, 1990; Heaton, 1990; Hill, 1990; Rieber, 1990b, 1991; Winn, 1991). The results of the study show that 75.5% of the subjects indicated that the strategy "I will briefly write down what the speaker said" was the least often used strategy. With the aid of multimedia technology provided through CD-ROMs, learners can have listening input in more different ways than in the traditional listening environment.

Based on the method of stratifying groups for the 30 listening strategies used by the 102 subjects, the present study finds that subjects used "compensation" listening strategy most. This finding shows that the combination of videos, sound, pictures, animation, and text is effective in promoting students' listening comprehension. Similar to the results of previous studies (Harless et al., 1999; Klassen & Milteon, 1990), the results of the current research indicate that the improvement of interactive multimedia for building listening skills can help learners gain confidence, proficiency, and motivation while learning.

2. Were There Significant Differences of Listening Strategies between More-Proficient and Less-Proficient EFL Listeners While Watching the CD-ROM?

In terms of the t-test of independent samples, the results of the study demonstrated that more-proficient listeners adopted listening strategies more frequently than did less-proficient listeners when watching the CD-ROM. For the five strategy group categorizations, the study also reveals that more-proficient listeners adopted five strategy groups more frequently than did less-proficient listeners. This result is consistent with the studies by Teng (1996) and Chao (1996), the results of which suggest that high-proficient listeners adopt more strategies than low-proficient listeners. Complementing Teng's study (2000) that effective learners make greater use of cognitive strategies, the current study also finds that more-proficient listeners adopted more "cognitive" strategies than did less-proficient listeners.

3. What Were the Strengths and Weaknesses of Using the CD-ROM as an English Learning Tool?

This research question aims to explore the strengths and weaknesses of using interactive CD-ROM for listening training relative to subjects' previous learning experiences. For example, in terms of the strengths, the subjects said that they could directly click on the icon of the passage to which they would like to listen. That is, they could watch the passage immediately. However, when it comes to

traditional cassettes/tapes, the subjects pointed out traditional cassettes/tapes were very difficult to synchronize immediately with the right track of the specific passage. This statement was similar to that of the studies by Roblyer et al. (1997) and Tanaka (1999), both of which indicate that CD-ROMs can search faster and save more time than do traditional learning tools, such as cassettes and videos.

As for the weaknesses, one interviewee agreed that learning English through CD-ROM is very helpful, but learning English with a computer is not like learning English with a teacher in the classroom. If she made any mistakes or had any questions, the computer would not help her solve her problems. This finding is consistent with that of the study by Dwyer, Ringstaff and Sandholtz (1991): teachers still have to take into account different teaching styles in order to involve students with different types of learning. Otherwise, students could easily lose interest in their learning due to being left alone in front of a computer.

4. What Attitudes Did the Students Exhibit toward Using the CD-ROM as an English Learning Tool?

The last research question aims to explore the attitudes the subjects exhibited toward using interactive CD-ROM for improving listening comprehension. All of the interviewees expressed positive attitudes toward using CD-ROMs for listening training. They pointed out that learning English by watching and listening to an interactive CD-ROM was like watching TV. This made them become more interested in English learning. They did not get bored or drowsy too easily. Also, they would be willing to study English through CD-ROMs in their free time, and they would be happy to listen repeatedly to the passages that they consider interesting. This finding supports the results of some previous studies (Baltova, 1994; Brett, 1997; Chang, 1996; Cronin, 1993; Jones, 2001) that multimedia programs are not only useful in learning listening skills but also enjoyable and easy to learn from.

Finally, the study suggests that with the advantage of the multimedia technology, interactive CD-ROM, learners will have more different types of listening input than in a traditional learning environment. Consistent with the results of previous studies (Baltova, 1994; Graber, 1990; Mueller, 1980; Rubin, 1995; Secules et al., 1992; Seghayer, 2001; Su, 1994), findings of the present study prove that the use of video CD-ROMs as visual supports can help students improve their listening comprehension.

In conclusion, multimedia technology such as CD-ROMs plays an important part in teaching and learning listening comprehension. Teachers can use such technology to motivate students, especially less-proficient listeners, to improve their English ability, and to raise their interests in learning English. Using CD-ROMs can make English teaching and learning engaging and effective. At the same time, students can employ CD-ROMs to improve their listening and other language skills. With the development and useful functions of interactive CD-ROMs, students can improve their listening comprehension by themselves at a variety of locations–home, work, etc. By watching and listening simultaneously, students can reduce boredom and frustration, which occur more easily when students use traditional media such as cassettes and tapes.

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Selected Appendix

Appendix 1.　30 Listening Strategies and Strategy Group Categorizations

Strategy group	Item	Listening Strategies
Cognitive	1	I will briefly write down what the speaker said
Cognitive	2	I will briefly translate what I heard into Chinese
Cognitive	3	I will not translate what I heard words by words
Cognitive	4	I will concentrate on the speaker's English
Cognitive	5	I will take notes while listening
Compensation	6	I will try to guess the content from the clues I already heard
Metacognitive	7	I will try to listen to every word the speaker said
Compensation	8	I will try to guess the content from my previous background knowledge
Compensation	9	I will try to guess the content from the speakers' facial expressions
Compensation	10	I will try to guess the content from the speakers' body language
Compensation	11	I will try to guess the content from the animation
Cognitive	12	I will try to guess the content from the speakers' intonation and pauses
Compensation	14	I will check the content by what I have already seen
Cognitive	15	I will try to understand the content by the clues and vocabulary I have heard
Cognitive	16	I will check the content by what I already heard
Compensation	16	I will try to guess the content by the following pilots
Memory	17	I will try to understand the content by my experience and what I heard
Metacognitive	18	I will try to listen for the words and phrases I have learned
Metacognitive	19	I will pay attention to the speaker's intonation
Metacognitive	20	I will listen carefully for the keywords to understand the content
Metacognitive	21	I will purposefully listen
Metacognitive	22	I will purposefully watch
Metacognitive	23	I will think in English, and listen in English
Cognitive	24	I will guess the meaning of sentences by the patterns and grammatical clues
Memory	25	I will try to understand the content by my experience and what I have seen
Memory	26	I will combine all the clues I have heard
Cognitive	27	I will drop conclusions from everything that I watched
Cognitive	28	I will drop conclusions from everything that I heard
Metacognitive	29	I will ask myself how much I understand
Affective	30	I will encourage myself and give myself confidence

台灣大一新生觀看互動式教學光碟使用之聽力策略

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摘 要

本文主要研究探討台灣大一新生觀看英語學習互動式光碟所使用之聽力策略。主要研究問題包含「觀看互動式光碟時學生經常使用之聽力策略」、「高成就與低成就學生在聽力策略使用上有無顯著的差異」、「運用互動式光碟於英語學習之優缺點」、「觀看光碟時學生之學習態度」。

研究對象為一百零二位中台灣某科技大學之非英文系大一新生，研究工具包含聽力測驗、互動式英語學習光碟、聽力策略問卷及訪談。受測者在看完互動式英文學習光碟後，隨即填寫聽力策略問卷。研究者針對聽力策略的結果，依據Oxford (1990)及鄧慧君 (民85)的研究分類為五大類型。此外，為了深入了解聽力策略使用及研究可信度，研究也從二組受測者中篩選出十位學生進行一對一的質性訪談。

此計畫針對台灣大一新生觀看英語學習互動光碟，提供實證研究資料，並分享相關英語聽力教學之心得。

關鍵詞：電腦輔助教學、聽力策略、互動式光碟、學習工具與態度。

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