



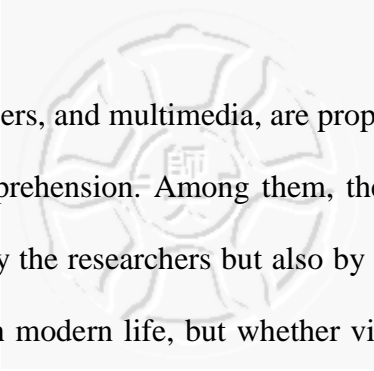
CHAPTER ONE INTRODUCTION

Background and Motivation

Knowledge and information is recorded and spread mostly through written languages. The ability of reading is therefore important for people to explore the unknown and express thoughts. A well-known magazine in Taiwan, *Common Wealth* (2002) indicated that reading has become the spotlight of the educational revolution in many countries (Huang, 2005). Nowadays, English is widely used in the world as a tool to communicate all over the world. Therefore, English reading ability is regarded as the most important skill in a foreign/second language for EFL and ESL learners (Sims, 1996).

However, as an English teacher in junior high school, the researcher finds that many students have difficulties comprehending English texts and therefore feel frustrated in reading English. They think reading in English is a laborious task and can't get as much pleasure as from reading Chinese articles (Chang, 1991). A common problem is that they read every word in the text but don't know what the text is about. Students may pay too much attention to bottom-up processing---word decoding and grammar analysis, causing failure in effective reading and overall understanding. However, the meaning of a text is not in the textual content itself, but lies in readers' cooperative experience with the text. Only when readers participate in the text actively can they gain the meaning conveyed in the text. Therefore, motivating students to read in English spontaneously is a main concern for English teachers.

Many kinds of reading strategies, such as extensive/intensive reading,

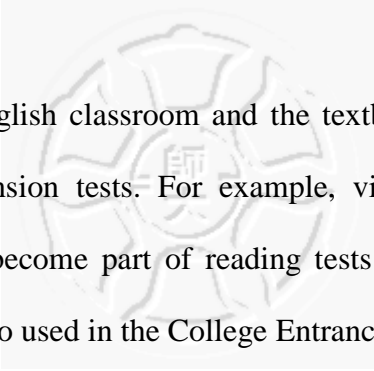


questioning, graphic organizers, and multimedia, are proposed to motivate readers and facilitate their reading comprehension. Among them, the effect of using visual aids has been noticed not only by the researchers but also by the practitioners. Visuals are everywhere in our high-tech modern life, but whether visual aids play a role in EFL reading comprehension and whether the sequencing of visual aids presentation affects the effect of reading comprehension has motivated me to conduct this study.

The Need to Investigate the Effect of Visuals

The important role of imagery on cognition and comprehension has been pointed out in many theories, such as the theory of transmediation (Siegel, 1995), the repetition hypothesis (Gyselinck & Tardieu, 1999), and the dual coding theory (Paivio, 1986; Sadoski & Paivio, 2001). Visual representation, compared to the verbal one, is regarded as more concrete (Goldstone, 1989) and more motivating (Glenberg & Langson, 1992; Peeck, 1987). When visuals are relevant to the verbal text, mental referential connections between these two modes will facilitate comprehension and memory because important information is processed twice (Glenberg & Langston, 1992; Gyselinck & Tardieu, 1999; Mayer & Sims, 1994; Moore & Scevak, 1997). Besides, the positive functions of visuals are suggested (Levin, Anglin, & Carney, 1987) and the effect of visual aids on reading comprehension has been proved by many L1 empirical studies (Gambrell & Jawitz, 1993; Glenberg and Langston, 1992; Mayer, 1989, 1999; Purnell & Solman, 1991) and L2 studies (Hudson, 1982; Liu, 2004; Omaggio, 1979; Tang, 1992).

Visual aids also play an important role in instructional and practical use. Language teachers, textbook-designers and even the national entrance examinations in Taiwan put high value on the effect of visual aids. Visuals have been used not only as

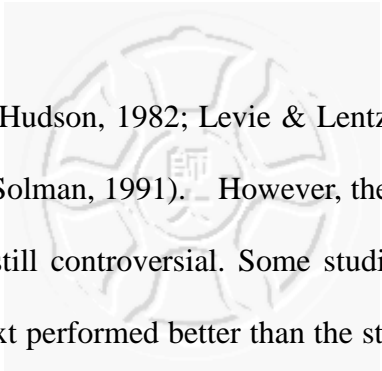


instructional aids in the English classroom and the textbooks but also as elicitation cues in reading comprehension tests. For example, visual aids such as pictures, graphics, and charts have become part of reading tests in Basic Competence Test. Besides, comic strips are also used in the College Entrance Examination as a elicitation cue to English writing.

Though the effect of visual aids on reading comprehension is commonly supported, there is still a need to conduct the present study. There are two reasons. First, most empirical studies were conducted among native speakers of English at primary and college levels. Few of them investigated the effect of visual aids on EFL reading comprehension at high school level. Second, some previous studies revealed that visuals might also have negative effects on reading comprehension. Visuals may hinder recall and comprehension if they are low in relevance to the text and do not reflect the text's linguistic complexity (Liu, 2004; Moore, 1988). Moreover, they might be a source of distraction (Samuels, 1970) or might favor elements from the text that are represented in the visuals, at the cost of the remaining text elements (Peeck, 1974). Therefore, the effect of the visuals on EFL reading comprehension still needs further investigating.

The Need to Investigate the Effect of Sequencing of Visual Aid Presentation

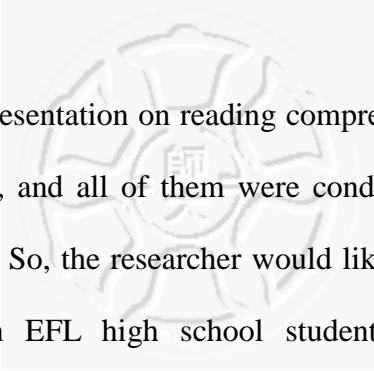
Since the use of visual aids is prevailing, the investigation of the best sequence of presenting visual aids is therefore important and meaningful. Many studies investigated the effect of the text with or without visuals on reading comprehension and found that visual aids presented simultaneously with the text were effective on reading comprehension because both verbal and nonverbal codes can be activated in reader's mental mind, resulting in better comprehension than just one code activated



(Gambrell & Jawitz, 1993; Hudson, 1982; Levie & Lentz, 1982; Mayer, 1989, 1999; Omaggio, 1979; Purnell & Solman, 1991). However, the effect of presenting visuals before or after the text is still controversial. Some studies found that students who received visuals after the text performed better than the students who received visuals before the text on reading comprehension (Broday & Legenza, 1979, 1980; Moore & Readence, 1984) while one study found that students in visuals-before group outperformed students in visuals-after group (Peeverly, 1981). Besides, many researchers highly appraise the effect of using visuals as a pre-reading activity to build readers' background knowledge (Hudson, 1982; Rivers & Temperley, 1978). Therefore, the effect of sequencing of visual aids presentation needs to be further investigated.

The discrepancy concerning when to present visuals is also revealed in its practical use. For example, language teachers who utilize pictures as their teaching aids may not know which the best sequencing is to present visuals. Many of them prefer to guide students to look at the pictures and make prediction of the text before reading while many of them like to guide students to look at visuals along with the text at the same time. Moreover, among all the EFL English textbooks and reference books, we can find that pictures are either located before the text as pre-reading activities or after the text as post-reading activities. It's also common to find texts have illustrations by their side. All these discrepancies urged me to investigate whether the sequencing of visual aids presentation affects readers' comprehension, and which the best sequencing of presentation will be.

Therefore, the second aim of the present study is to investigate the effect of presenting visual aids in pre-reading, during-reading, and post-reading on EFL students' reading comprehension. There are three reasons for comparing the effect of these three sequencing of presentation. First, few studies explored the effect of



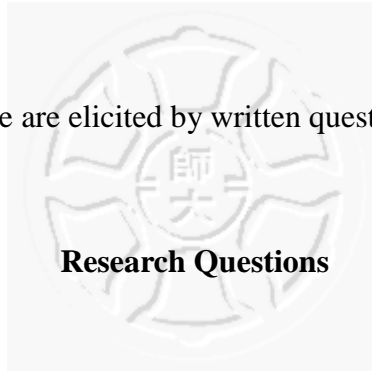
sequencing of visual aids presentation on reading comprehension (Brody & Legenza, 1979, 1980; Peverly, 1981), and all of them were conducted on native speakers of English at the college level. So, the researcher would like to investigate the effect of sequencing visual aids on EFL high school students. Second, the study that investigated the effect of the three different sequencing of visual aids presentation on the listening comprehension of students in Taiwan (Chen, 2002) found that the order of the effect from the most to the least was pre-listening, post-listening, and during-listening. The researcher is thus interested to know if the result is the same for EFL reading comprehension. Third, since the usefulness of visuals is highly praised by the practitioners, investigating the best sequencing of visual aids presentation should be very helpful not only for teachers, textbook designers, but also for the learners.

The present study is therefore aimed to investigate (1) the effects of visuals on EFL junior high school students' reading comprehension and (2) the effect of sequencing of visual aids presentation on students' reading comprehension.

Purpose of the Study

The purpose of the present study is to investigate the effect of visual aids on junior high EFL students' English reading comprehension in a narrative text as indicated by recall and inference generation. It also examines the effects of sequencing of visual aids presentation (visual aids before, during, and after reading the text) on their recall and inferences. For inference generation, two types of inferences are explored from participants' recall of the text with or without visual aids, and recall from pre-, during, and post-reading comic strip. Finally, students' perceptions toward the effect of visual aids and the sequencing of their presentation

on their reading performance are elicited by written questionnaire and interview.



Research Questions

Five research questions were asked as follows in order to investigate the effect of comic strips, the sequencing of comic strips presentation, and students' perceptions:

1. What is the effect of comic strips on EFL students' reading comprehension as indicated by recall?
2. What is the effect of the sequencing of comic strips presentation on EFL students' reading comprehension as indicated by recall?
3. What is the effect of comic strips on EFL students' inference generation as indicated by recall?
4. What is the effect of the sequencing of comic strips presentation on EFL students' inference generation as indicated by recall?
5. What are students' perceptions toward the effect of comic strips and different sequencings of comic strips presentation on their reading comprehension?

Definition of Terms

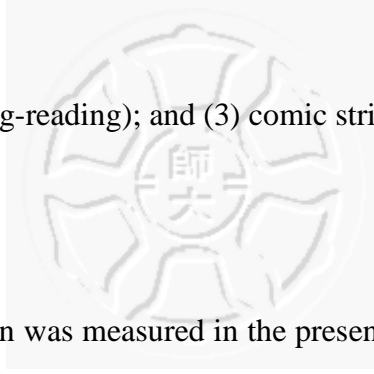
Visual aids

The visual aid used in the present study is the comic strip (cartoon). It is a series of pictures that display visual representation of the text content.

Sequencing of the Comic Strips Presentation

Three sequencings of comic strips presentation were examined in the present study. (1) Comic strips before text (Pre-reading); (2) simultaneous presentation of

comic strips and text (During-reading); and (3) comic strips after text (Post-reading).



Reading comprehension

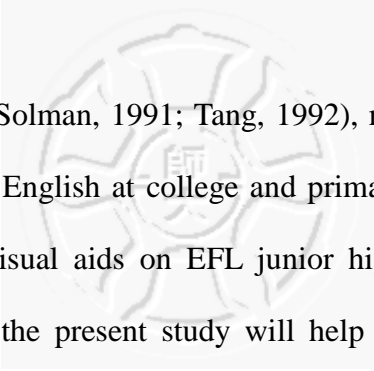
Reading comprehension was measured in the present study via written recall and inference generation. It is a common assessment in L2 reading, requiring students to write down whatever they remember in the language they're familiar with, in this case, Chinese, after reading a text. Participants' recalls were evaluated based on the pausal unit system proposed by Johnson (1970) and validated by Bernhardt (1991). An individual pausal unit is demarcated for every major idea in the text. It is determined when one starts and ends with a pause when reading aloud the text (Johnson, 1970). In the present study, two native speakers helped determine the pausal units in the text.

Inferences

Inferences from participants' written recall were examined as well. They are idea units which are not in the text, but are inferred by the readers. In the present study, two types of inferences are investigated, text-based (within-text) inferences and reader-based (elaborative) inferences (Barry & Lazarte, 1998; Chu, 2002). Text-based inferences are the idea units synthesized or summarized from the existing textual information. Reader-based inferences are those additive ideas combined from readers' prior knowledge with the text.

Significance of the Study

The significance of the study can be recognized in the following aspects. First, though the effects of visual aid on reading comprehension have been supported by many studies (Gambrell & Jawitz, 1993; Hudson, 1982; Liu, 2004; Mayer, 1989, 1999;



Omaggio, 1979; Purnell & Solman, 1991; Tang, 1992), many of them are conducted with the native speakers of English at college and primary levels. Few explored the effect of comic strips as visual aids on EFL junior high school students' reading comprehension. Therefore, the present study will help us understand the effect of comic strips on EFL reading comprehension and inference generation. Second, studies investigated on the effect of different sequencings of visual aids presentation on EFL reading comprehension are rare. The present study would help us to understand the best sequencing of presenting visual aids is by providing some empirical evidence. Last but not least, the results of this study will offer valuable suggestions for EFL teachers and textbook designers to make good use of visual aids.

Organization of the Study

This study is composed of five chapters. In Chapter One, the introduction of the background related to the effects of visuals on L2 reading comprehension, purposes and significance of the study, research questions and definition of key terms in this thesis are presented. Chapter Two is the review of the literature concerning theoretical framework and empirical research related to the effect of visuals on comprehension and the effects impacted by the sequencing of visual aids presentation. In Chapter Three, the methodology of the study is described including the participants, instruments, data collection procedures, and the methods to analyze the collected data. In Chapter Four, the quantitative and qualitative results and findings of the study are presented. Chapter Five includes the conclusion and discussion of the findings in the present study followed by pedagogical implication and suggestions for future study.