#### **Chapter Two**

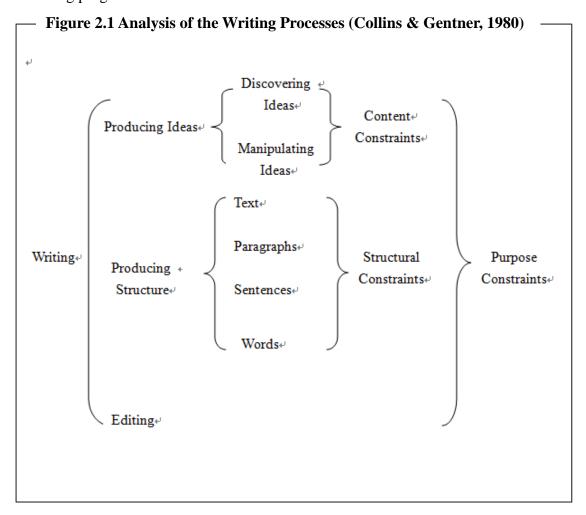
#### **Literature Review**

Literature review falls into six parts, i.e., discoveries and stimuli in prewriting stage, the effects of visual stimuli on language learning, wordless picture books for language learning, pictures for guided writing, and picture prompts for different language learners and research questions.

# 2.1 Discoveries and Stimuli in Prewriting Stage

Writing is a composing process which undergoes several stages. According to Flower & Hayes (1981), there were three stages of composing process, i.e., planning, translating and reviewing. Collins & Gentner (1980) had more detailed discussion of the composing process—idea production, text production and editing (See Figure 1). In their study, the idea production stage contained two sub-processes—idea discovery and idea manipulation. In the idea discovery sub-process, the writer concentrates on jotting down all the ideas that are related to the topic without worrying about grammar and spelling. Then, in the idea manipulating sub-process, the writer puts the ideas previously generated into a hierarchical structure, in which main points and supporting details are identified. In the text production stage, the writer converts the ideas into written texts which involves operations on four levels—the text level, the paragraph level, the sentence level and the word level. In the editing stage, the writer edits both the content generated and the text created to meet the communicative goals. However, student's writing ability is dependent upon their ability to develop related ideas (Anderson & Lapp, 1988). Apparently, the first stage is crucial to the whole

process because the writer needs to put together the related ideas to continue the following progress.



On the other hand, in Murray's (1982) study, the stages could be divided into five categories: (1) prewriting, (2) drafting, (3) revising, (4) editing, and (5) publishing. Prewriting is the stage before words emerge on paper. She believed that up to 70% of writing time should be spent on prewriting stage. This is because prewriting activities have the following advantages: (1) they help students stimulate thoughts for getting started and making writing easier; (2) they help students remove the mental block and distraction that prevent ideas from coming out; (3) they help students write in a more motivating and stimulating way instead of pondering over an essay topic alone; (4) they help create a cooperative and enjoyable atmosphere in the writing class (Liu,

2006). Therefore, in the pre-writing stage, teachers should spend more time assisting students in organizing words, concepts and ideas in their compositions. Meanwhile, stimuli in the writing process play an important role. In the next section, visual stimuli will be introduced as a good helper in the process of language learning.

# 2.2 The Effects of Visual Stimuli on Language Learning

In modern world, the visual media play an essential role in the acquisition of language. Visuals can bring today's world into the language learning environment by serving as a reflection of what exists outside of the classroom. Bagget (1989) posited that visual images contained more information because they had more cognitive pegs that could be used to make associative and referential connections between visual representations and information held in long term memory. In Hyerle's (1996) study on curriculum development, he noted that the visual tools enabled students to transfer patterns of thinking, to focus on learning, to build vocabulary, and even to think and write better than before. This form of stimuli allows learners to analyze their own worlds (Canning, 2001). Visual aids serve as helpful tools for learners to relate the outer experiences to inner thoughts.

In fact, the visual stimulus for the writing or oral expression is an urgent need for language learners (Golub, 1969). In Dubes' (1974) language research, he made a statement that the students did a distinguishing improvement in verbal ability after they received visual training. Wright (1989) found that visual stimuli contributed to the context in which the language was being used. Then Renk et al. (1993) claimed that visual stimuli could assist in the development of mental model in which language learning took place. Visual aids can be used as atmosphere, motivation, focus of attention, context, explanatory support, general comprehension, mnemonic support, cultural insights, and conversational stimuli (Hammerly, 1995). There are some more

researches on how visual stimuli benefit students' language learning. In McGarvey's (1999) research, she successfully made use of painting to inspire the participants' storytelling and writing ability. She maintained that language learning with the aid of visual presentation involved children in whole brain education. In short, visual stimuli make many associations in language learning. The next section is on the effects of using wordless books as a language learning tool.

## 2.3 Wordless Picture Books for Language Learning

"Imaging is the mode of our most primitive thinking and storytelling is the earliest product" (Langer, 1978, p. 132). Wordless picture books convey meaning through the illustrations. A wordless book stretches the imagination, allowing learner to explore language through illustration. Pictures in storybooks may add many additional details (Stewig, 1992). Pictures can be used to help to fill the gap between the text and context (Pramono, 2005). Fang (1996) suggested that the contributions of pictures to the overall development of children's literate behavior seem to be overwhelmingly great. His conclusion was as follows:

There are six roles that pictures play in storybooks. Pictures may serve to help (a) establish the setting, (b) define/develop the characters, (c) extend/develop the plot, (d) provide a different viewpoint, (e) contribute to the text's coherence, and (f) reinforce the text. And pictures also provide several benefits, including motivating the reader, promoting creativity, serving as mental scaffolds, fostering aesthetic appreciation, and promoting children's language and literacy. (p. 134)

Picture books without any words can also be used as a valuable resource for writers of all levels, kindergarten through high school (Tompkins, 1987). This kind of books can help develop writing skills of children of all ages as they come to foster the

progression of reading stages, skills and styles. The pictures in this kind of books foster the development of essential cognitive and linguistic skills, such as understanding story concept, recognizing details, sequencing, and developing characters (Fusco and Noren, 1988). They can also serve as exemplars of the qualities of effective writing (ideas, organization, word choice, sentence fluency, and writing conventions) and provide a scaffold for students to incorporate in their compositions (Paquette, 2007). Thus, the use of wordless picture books can improve students' writing of all ages in various writing stages, writing skills and writing styles. Therefore, pictures in the books have positive effects on all levels of language learners.

#### 2.4 Pictures for Guided Writing

As the proverb goes, "A picture may be worth 1,000 words," pictures can bring plenty of concrete images to foster composing process. Pictures can be used to encourage the development of writing skills, not only with young children who are beginning writers, but also with older students who have already possessed some skills in writing (D'Angelo, 1979). The use of picture prompts to elicit writing samples is a common practice but it adds a level of complexity to the writing process. Pictures, which are processed in the image substructure, are assumed to be a way of triggering mental imagery and therefore to produce more creative writing (Sinatra, 1986). Schweizer (1999) noted that writing via picture prompts required a writer to interpret the picture, create meaning from the picture, and then transfer the visual information into a verbal mode of expression. Recently, more and more local researches and studies have been conducted on picture-guided Chinese writing instruction. Tzeng (2002), an elementary school teacher, used a picture-guided writing strategy in her Chinese class, concluding that the students not only learned basic

principles and concepts to compose a complete article via pictures but also had better motivation in the story writing. Hou (2007), a junior high school teacher, explored the influence of pictures used in Chinese composition in junior high school, finding that the students' composition writing performance improved. In Wu's (2008) study, she matched up ability indicators in the Mandarin language domain with teaching strategies, suggesting teachers incorporate pictures into writing curriculum.

Moreover, there are some researches conducted on the effect of picture prompts on English writing. Chiang (2003) did both topic-guided and picture-guided writing instruction in her study conducted in a junior high school, stating that picture aids facilitated the 60 third graders' organizational skills and enriched their story content. Chien (2007) classified three-frame picture prompts and examined the effect of different types of three-frame picture prompts on the writing performance of 45 third graders of a senior high school, finding that the cause-and-effect type with an expected and unexpected consequence had a better effect on the students' wiring fluency. In another study conducted by Liu (2008), she did research on the effect of the different writing prompts on the English writing performance of 115 third graders of a senior high school, claiming the writing prompts had the significant effect on vocabulary richness.

#### 2.4.1 Pictures to Improve Writing Content

Hsu (1991) stated that the picture-elicited writing task can get students actively involved in the writing process, enrich students' writing content and improve their writing attitude. First of all, pictures can serve as a scaffold for language learners to enrich the content. Alejandro (1994) found that pictures and other forms of visuals were popular because pictures evoked ideas and thoughts for children to write about, thus creating descriptive writing. What's more, picture prompts stimulate ideas,

convey information that can be shared, and help a writer relate to his/her own background knowledge (Stevick, 1986; Ur, 1988). Pictures lead the learner to draw out language from their own knowledge and personal experiences through exposure to the stimuli presented before them (Canning, 1999). In this way, pictures can be used to provide the content of the topic in order to make writing easier and better. Besides, pictures can represent these non-verbal sources of information. Pictures can stimulate and provide information to be referred to storytelling (Wright, 1989). Single pictures and picture sequences provide stimulating illustrations for stories (Sinatra, 1981). With more exercises, students will be able to know how to develop the content length. Teachers may encourage children to use the pictures to expand their vocabulary and fully express their ideas, so students may also be guided to expand sentences (Carter, et al., 1998). Hugh, Nurss, & Wood (1987) stated the following:

Pictures and wordless books are helpful visual props and idea prompts for encouraging use of language. But best of all is encouraging children to invent their own original stories. (p. 12)

McGee and Tompkins (1983) introduced wordless picture books to middle and secondary school teachers and discussed how such books can be used to develop students' language ability. They stated that pictures provided in a series of wordless picture books appealed to older students and helped develop students' imagination and sensitivity to writing styles and expressive modes as well. D'Angelo (1979) claimed, "Pictures in wordless books can be used to promote...creative writing" (p.814). Imagination and creativity also enrich the story content.

#### 2.4.2 Pictures to Improve Writing Organization

Pictures can provide concrete cues for learners to follow and help them to write with better organization. Baker and Quellmalz (1979) found that eighth graders

achieved higher scores in the area of organization when using pictorial stimuli. The learners are assisted by pictures to visualize the relationships and connections between ideas (Sinatra, 1981). Additionally, a study of written responses by fifth through seventh graders indicates that pictorial stimulus was a strong motivating factor in the generation of writing (Brennan, 1990). Cole, et al. (1999) indicated that pictorial stimuli improved students' writing in organization, unity and coherence. The concrete stimuli of pictures allow learners to easily sequence the events in a story, to relate visual images to words and sentences, and to compose a connected paragraph. Lee (1994) claimed that pictures were really helpful to her students in organizing, composing and expressing their thoughts. Moreover, series of pictures can be used to teach students the underlying structures of different type of discourse (Sinatra, 1986). That is, the interrelated relationships of the pictures represent the sequence of the nonverbal events which help students compose a unified piece of written discourse. As D'Angelo, (1979) points out:

These writing skills can be viewed as developing in stages from an ability to produce single words and phrases, to the production of one complete statement, followed by writing two or more complete statement in logical order about the same topic. (p. 813)

Using organized visual stories helps students conceptualize a unified theme.

Sequences of such pictorial aides induce organizational thought processes and provide cues for coherent writing as well; individual pictures provide "context clues" for sentence production and give rise to a coherent formulation of a paragraph (Sinatra, 1973). Thus, by following the frame of the pictures, the learners are stimulated to write a unified story with a theme and related events, so they can make improvements in writing organization.

With the above review of the literature, it is obvious that picture prompts are held highly as successful stimuli to effective writing.

# **2.4.3 Pictures to Promote Writing Motivation**

Using pictures as prompts will create an atmosphere of enjoyment and ease. Sinatra (1973) found that those who were generally weak in composition could be aided by pictorial presentation. Lee (1994) concluded that instruction of using pictures as a guided writing environment assisted foreign language beginners in developing and improving their writing skills as well as lowering the anxiety level of expressing oneself in the target language. Her study also suggested students in the lowest 25% on the pretest made the most significant gains. Additionally, in Chiang's (2003) investigation on the effectiveness of picture prompts on EFL writing, there is a positive change of the students' attitude and motivation. Picture aids can be used as a motivational vehicle.

Using pictures to develop student writing skills can be both fun and motivating. As Degler (1979) emphasized, "these picture books foster positive attitudes in the children about competence with books..." (p. 400). If students perceive writing to be fun, then they will be strongly encouraged to share their thoughts and feelings on paper. What's more, pictures can motivate the students and make them concentrate and participate (Wright, 1989). Using pictures can help children to feel that they are the masters of their language (Carter et al, 1998). It is evident that the use of pictures in writing instruction allows the learners to improve and develop their language abilities.

## 2.5 Picture Prompts for Different Language Learners

The visual stimuli will bring different effects on different learners. To begin with,

the function of the two hemispheres in the brain differs: the left side is more verbally orientated and the right side is more creative and visual imaginative. The dual coding theory proposed by Paivio (1979) shows that information is encoded in two separate but interrelated systems, a verbal system which stores linguistic information, and a non-verbal system which stores visual-spatial information and mental imagery.

Imagery is a function of the right brain and an important element in the production of creativity (Gowan, 1978). An underlying premise for integrating pictures into writing activities is that mental imagery is viewed as holistic and creative while mental verbal processes are viewed as linear and analytical (Arnheim, 1993). In a research on learning style, Dunn (1983) found that for right-brained students, tests had to start with drawing pictures and then students would "translate" the pictures into words. It seems that the right-brained writers will write better when seeing a visual image.

Second, working memory will also affect students' writing performance (Scardamalia, et al., 1982). Stallard (1974) stated that good student writers had better ability to compose than poor student writers. Poor student writers often pause and spend more time composing for lack of clues or cues. By contrast, good student writers have more inner cues in their mind which enable them to find more ideas and inspirations.

Third, gender has an influence on the use and interpretation of pictures. A study of the responses of undergraduates to "female-interest pictures" and "male-interest" pictures indicated that subject matter was an important variable in the responses of males and females (Crawford, Chaffin & Glenn, 1983). In a study of undergraduate and graduate students, Ogden (1993) found that males made more content-specific comments about pictures, while females produced more "general" or interpretive comments. Males and females did not differ, however, in their ability to interpret

pictures of varying complexity.

Fourth, some researchers also indicated that visual stimuli brought different effects on different types of learners. According to Lee (1994), a few students commented that they did not benefit much from pictorial instruction because of personal preference for another learning style. Only topics without any picture prompts allowed them to elaborate and create with their thought without the limitations of pictorial content. Besides, Chiang (2003) also reported that in the interview, some of the students thought pictures tended to restrict their stories to a minimum enumeration of what they see in the pictures. If there were no pictures, they could develop the stories more creatively.

Finally, age differences play an important role in the interpretation of pictures. In a study of second, fifth, and eighth graders, Bingham and colleagues (1981) concluded that the ability to identify the main idea in pictures increases with age. Rembold and Yussen (1983) confirmed these findings in another study of second, fifth, and eighth graders. Schweizer (1999) indicated that the main effect of picture prompts for different grade-level (fifth and eighth) was significant for the total scores. In Chiang's (2003) study, she proved picture-guided writing instruction facilitated junior high school students' organizational skills and enrich their story content. Therefore, using pictures as prompts should be more useful to senior high school students.

Nevertheless, according to the analysis done by CEEC (College Entrance Examination Center) in Taiwan, the number of SAT examinees who scored zero in the English composition has risen these years. From 2004 to 2009, the percentage rose from 12.83% to 15%. The researcher wondered if picture prompts really benefited those low achievers or if picture prompts greatly helped high achievers' English

writing. There is little research, however, on what effect picture prompts have on the writing performance of high school students with different English abilities. Therefore, the present research will be conducted.

## 2.6 Research Questions

Although lots of studies have been conducted on the influences of picture prompts on writing, few of them are conducted on the effects of picture prompts on different levels of EFL writers. In this study, the researcher will investigate the effects of picture prompts on the writing performance of high and low achievers in senior high school. The following research questions will represent this study:

- 1. What effects does it have on the content of high and low achievers' English writing to use pictures as prompts for narrative writing?
- 2. What effects does it have on the organization of high and low achievers' English writing to use pictures as prompts for narrative writing?
- 3. What effects does it have on the vocabulary of high and low achievers' English writing to use pictures as prompts for narrative writing?
- 4. What effects does it have on high achievers' and low achievers' overall writing performance to use pictures as prompts for narrative writing?
- 5. What are the participants' attitudes toward English writing after they are given pictures as prompts?