

國立政治大學英國語文學系碩士在職專班論文

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以學習者為中心與合作學習法運用電子白板：國中英語教學之個案研究
Using the Interactive Whiteboard for Learner-centered and Cooperative Language Learning:
A Case Study on English Instruction in Junior High School



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中華民國 102 年 5 月

May, 2013

Acknowledgments

First, I would like to express my appreciation to my advisor, Dr. Chin-Chi Chao, for the professional guidance and constant inspiration she has given me. Without her, I would not complete my research for this work. My heartfelt gratitude is also extended to the committee members, Dr. Chen-kuan Chen and Dr. Chieh-yue Yeh, who offered many valuable comments and suggestions to make this thesis acceptable. Moreover, I would like to thank my colleagues, Huang, Jia-Li, and Yang, Chau-Kai, for their wholehearted supports and helpful comments throughout the whole research.

Finally, I am grateful to my family, especially my parents. They gave me supports and encouragements. Also, my elder sister, Kang-yun, who did me a great favor comforting me whenever I felt depressed. Their companionship is priceless to me. I am glad I can finally share the honor with them.



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碩士論文題要

論文名稱：以學習者為中心與合作學習法運用電子白板：國中英語教學之個案研究

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論文提要內容：

本研究旨在觀察了解利用電子白板融入英文教學，輔以學習者為中心的教學理念讓國中九年級的學生利用合作學習的機會來完成演示任務的過程。本研究方法採質性研究，採用兩班共選四組十六名九年級學生做為觀察對象，利用課堂觀察，訪談，及教師反思日誌，著重在觀察老師、學生與電子白板三者之間的互動過程，學生學習態度以及老師對於自己教學方式的省思。

經由本研究發現學生能接受新的電子白板教學方式，電子白板的多媒體教材能吸引較低成就學生的學習興趣，進而增加其跟電子白板互動的意願。學生剛開始不能適應學習者為中心的教學法，在團隊合作方面通常都以組長為中心擔負過多工作，有責任分配不均的問題。部分學生只被動地接受組長分派工作，甚至有學生完全沒有參與。進一步分析後發現學生因缺乏相關合作經驗、指導與長期競爭的升學壓力下，在過程中對於此計畫有諸多抱怨，認為本計畫壓縮

他們學習時間進而影響之後的升學考試；但是在經過幾次成功完成演示任務後，學生開始產生信心而改變對此教學法的態度。因此雖然電子白板有其缺點，但學生仍對於電子白板融入教學活動保持正面態度。

以研究者同時為教學者的角度而言，有了電子白板教師能方便提供貼近生活的補充教材，設計文法互動遊戲，刺激學生學習意願。然而電子白板也有其缺點，包括尺寸限制、反光、燈光昏暗導致學生上課精神不佳等問題。更重要的是，實施學習者為中心的電子白板教學為身為教師的一大挑戰，教師要轉換身分為學生學習的輔助者、適應並開發電子白板的教學軟體、承受學生們質疑此項計畫的聲音並且在不拖累教學進度下實行本研究，這些在在都成為教師的壓力來源。然而在看到學生的進步及態度的轉變，再加上觀察者的鼓勵及其對於電子白板的教學也產生興趣後，教師也發現電子白板所帶來的改變及其效益而有所改觀。透過本研究同時也發現教師需要更多的資源與協助來完成電子白板的教學。最後，研究者提出相關的建議以作為未來電子白板教學研究的參考。

Abstract

The purpose of the study was to investigate the process of utilizing the Interactive Whiteboard (IWB) and the learner-centered instruction and having four groups of sixteen 9th graders, who belonged to two classes, cooperated to accomplish presentation tasks. Grounded in qualitative inquiry, the study used classroom observation, group interviews, and the teacher's log as the data for analysis. Focusing on the process of interaction between the students and the IWB, the students' attitudes, and the teachers' own reflections after implementing the IWB plan.

It was found that the students accepted the new IWB instructional plan because of its multimedia teaching material, which facilitated some low achievers' interests making them willing to interact with the IWB. As for the students' performances, the researcher found that the students were not used to the learner-centered instruction.

The group leaders were usually responsible for the majority of works and caused an unfair share of works among group members. Some students stayed passive and only received the work from their group leaders, and some did not involve in the group activities and presentations at all. After further investigation, it was found that

the students were lack of experience and teacher's guidance. Furthermore, they were long under the competitive educational culture. They thought that doing such cooperative tasks would take up their study time and further affect the effort they make for the high school entrance examination, so they had a lot of complaints during the plan. However, after several times of accomplishing the presentation tasks together, the students started to gain confidence and change their attitudes. Although there were some drawbacks, the students eventually held positive attitudes toward the IWB instructional plan.

From the teacher/researcher's point of view, with the IWB, the teacher could also provide the students with some authentic materials and design some grammar games for the students to learn. However, there were still some disadvantages of the tool, including size limitation, sun reflection, and the dark light which made the students feel sleepy. Most importantly, it was a great challenge for the teacher/researcher to implement the plan. The teacher had to first change her role from a dominator to a facilitator, adjust the program and develop some games from the IWB, implement the plan under the pressure of the students' complaints while following the school-required teaching schedule in the meantime. Seeing the progress of the students' performances and their change of attitudes, together with the encouragement of two observers and the other English teachers' interests in the plan, the teacher/researcher changed her attitudes toward the plan as well. The results of the study suggest that more resources and supports are needed for teachers to achieve the IWB plan. Finally, other suggestions for the IWB instructional plan are provided for further studies.

Chapter One

Introduction

Background

According to the Ministry of Education in Taiwan (MOE) in its *Information Education White Paper 2008-2011*, teachers should learn and teach with information and communications technology (ICT). One of the ICT tools that has been strongly promoted recently by the MOE is Interactive Whiteboards (IWB), which according to Bennett and Lockyer (2008, p. 289), are “...large touch-sensitive boards that allow teachers and students to view, manipulate, create and distribute electronic teaching and learning resources using familiar computer applications.” Since the use of an IWB is an important trend in education, the MOE has encouraged schools to integrate it into the teaching of every school subject, including English. Many workshops are being held with the hope that teachers will be able to use IWBs to enhance students’ learning.

However, using workshops as a way to engage teachers in the presentation of theory, observation, and demonstrations and to develop necessary skills in using a teaching tool has been under much criticism in recent years, as Fullan and Stiegelbauer (1991, p.315) put it, “Nothing has promised so much and has been so frustratingly wasteful as the thousands of workshops and conferences that led to no significant change in practice when teachers returned to their classrooms.” One of the reasons is that most workshops do not take the teaching contexts into consideration.

In order to make sure that IWBs can be properly integrated into the existing instructional routine of a junior high school English curriculum, this researcher feels the need to review existing teaching routines and develop an innovated way of integrating the tool in the classroom. Research shows that best use of computer tools in the classroom often involves a change of teaching philosophy, including more learner-centered perspective and taking into account the unique learning and teaching culture (Leavy, 2002). This study developed a learner-centered instructional plan, implemented it, and documented and analyzed the nuanced use of IWBs in a classroom with groups of junior high students. The students' reactions to the IWB-supported instruction help to understand what it takes to actually get the most benefits from having an IWB in the junior high school English classroom.

Purpose and research questions of the study

The purpose of this study was to investigate the process of implementing an IWB-supported instructional plan which aimed to encourage learner involvement and learner-centeredness under the unique culture of the third year of junior high school, which normally is under a lot of pressure from the Basic Competence Test (BC Test). The research questions are listed below:

1. To what extent did the students accept the learner-centered requirement in the instructional plan?
2. How did an English teacher and her junior high students collaboratively implement an IWB-supported instructional plan?
3. After three cycles of implementation, what insights did the teacher/researcher derive from the experience which helped her think [differently] about her existing teaching practice?

Significance of the study

With the tremendous enthusiasm associated with IWB, the concern is that mistakes might be repeated (Dunkel, 1991; Garrett, 1991). The emphasis of effectiveness should be shifted to, as Dunkel (1991) suggested, "...illuminate the mental process activated and even cultivated as a result of Computer-Assisted Language Learning (CALL) instruction" (p.21). In other words, the computer should only be considered as an assisted tool, not an approach. With the concept that a computer is a tool, what is really important is to investigate the changing nature of teachers' and students' thinking process, attitude, and overall experience and of their interaction through certain pedagogical innovations while utilizing the computer tool, such as using learner-centeredness and cooperative learning with the IWB, in a real-world context. The present study focused on students' learning processes and their attitudes toward the new instruction; meanwhile the teacher's attitude and the change of her viewpoints were also included. The results derived from the study will provide useful insights and suggestions for further IWB studies.



Chapter Two

Literature Review

In this chapter, research on the effectiveness of CALL and Interactive Whiteboards was reviewed and explored. Moreover, learner-centeredness and cooperative learning are introduced as a way to integrate IWB instruction into the conventional English classrooms in junior high schools in Taiwan.

Research on CALL

Numerous studies have reported that CALL, when used properly, tends to have positive impacts on language learning (Chapelle, 2001; Crystal 2001; Hanson-Smith, 2000; Levy, 1997; Levy & Debski, 1999; Warschauer & Kern, 2000; Warschauer, Shetzer, & Meloni, 2000; Yoshii, 2006). Analyzing many studies on CALL, Fotos and Browne (2004) divided CALL activities into seven types, including writing, communicating, media usage, Internet, concordance, distance learning, and test taking. Some researchers (Fotos & Browne, 2004; Lee & Noh et al., 2011; Wang, 2011) have put these activities into studies and experiments and found that CALL could enhance students' motivation, autonomy, and self-confidence. Among the studies, many also explored how CALL enhanced students' achievement on writing (Chikamatsu, 2003; Jafarian & Soori, et al., 2012), vocabulary acquisition (Bowles, 2004; Tozcu & Coady, 2004; Yoshii, 2006), speaking through computer-mediated communication (CMC) technology (Barr, Leakey, & Ranchoux, 2005; Jepson, 2005), and listening ability (Gorsuch, 2004; O'Brien & Hegelheimer 2007; Weinberg, 2002). In addition, students had positive attitudes to CALL (Hashemi & Najafi, 2011; Lan,

Hsiao, & Chiang, 2010; Mohsen & Balakumar, 2011; Sagarra & Zapata, 2008). Such cases with efficacy on CALL have made many educators interested in integrating the technology into classrooms and hoped that their students will benefit from computer-assisted instruction.

Research on IWB

In recent years, a new technology, IWB, has appeared and attracted much interest. A great number of researchers (Beauchamp, 2004; BECTA, 2004; Beeland, 2002; Derek et al., 2005; Glover & Miller, 2001; Hall & Higgins, 2005; Higgins, Beauchamp, & Miller, 2007; Kennewell et al, 2008; Smith, Hardman, & Higgins, 2006; Wall, Higgins, & Smith, 2005) started to investigate IWBs to see if it has influence on student learning. There have been sizable recent studies of IWB (Beauchamp, 2004; BECTA, 2004; Beeland, 2002; Derek et al., 2005; Glover & Miller, 2001; Hall & Higgins, 2005; Higgins, Beauchamp, & Miller, 2007; Kennewell et al, 2008; Smith, Hardman, & Higgins, 2006; Wall, Higgins, & Smith, 2005) published in a lot of educational journals showing that many researchers have paid attention to IWB. Among these studies, most of them were investigations in British schools. The reason lies in the fact that the UK government budgeted almost £ 50 million in 2003 to purchase IWBs for primary and secondary schools. The interests in this new tool have attracted researchers' attention for the past decade and they put much emphasis on the study of students and teachers and to test the effectiveness and usefulness of the IWB.

Numerous studies in Taiwan have investigated students' performances and attitudes after utilizing IWB for English instruction (e.g., Chang, 2010; Fang, 2012; Gong, 2011; Hsu, 2010; Ke, 2012; Li, 2012). The participants in these studies showed

significant improvement after the IWB instruction. The effectiveness of integrating IWB into English as Foreign Language teaching environment in Taiwan will be discussed more completely in the section below.

The effectiveness of IWB

A large number of studies pointed out that integrating IWB into the class did have benefits for students with different levels (Beauchamp, 2004; BECTA, 2003; Bell, 2002; Cogill, 2002; Leavy, 2002; Smith et al., 2005). The positive effects for students, including improvement of their grades on different subjects, increase in motivation, interactivity and collaboration, engagement in the task, and development of thinking skill (Beauchamp, 2004; Cogill, 2002; Hodge & Anderson, 2007; Quashie, 2009; Smith et al., 2005; Türel & Johnson, 2012). The participants of these studies ranged from primary to higher education students as well as students with special needs (Smith et al., 2005). The studies conducted with different research designs such as quasi-experimental, observations and case studies have pointed out the advantages and disadvantages of IWB for both teachers and students. From teachers' point of view, the advantages of IWB are fancy multimedia display, easy access to develop sources of supplementary teaching materials, time saving (e.g., without the need to erase the board after use) and more interaction with students (Bennett & Lockyer, 2008; Cogill, 2002; Gray et al., 2005; Hodge & Anderson, 2007; Quashie, 2009; Smith et al., 2005). However, there are also complaints, including being too time-consuming at preparation, lack of resource supplement and training, hardware problems, and students' brief period of enthusiasm when using IWB (Cogill, 2002; Glover & Miller, 2001; Gray et al., 2005; Smith et al., 2005). Nevertheless, Quashie (2009) and Smith et al. (2005) pointed out that some students had some negative

perceptions of IWB when it was used in the classroom. The problems include sun reflection which can blind their vision, and that the problem-solving procedure cannot be seen step by step on the board.

Though these findings indicate some benefits of IWB on students' learning and teachers' teaching methods, there are still many aspects that did not take into consideration by the previous studies, such as teachers' pedagogical approaches and students' thinking processes associated with the IWB. Hence, qualitative inquiries are needed to search for more dimensions of the learning experiences, instead of focusing solely on products and effectiveness in language classrooms (Garrett, 2008; Motteram, 1999).

The need for qualitative studies of IWB

There are already plenty of quantitative studies providing evidences to support the possible benefits of IWBs, but only a few studies focused on the learning process of the learner. As Garrett (2009) claimed that “ a great deal of research is needed, not only on carefully defined questions of pedagogical efficacy, but also on details of the learning experience and the nature of learners' idiosyncratic language processing” (p.715-716). Two authors, Garrett (2008) and Motteram (1999), continued to urge for integrating research, practice and theory. Also, Debski's (2003), argued that though quantitative research about CALL have declined in recent years, most qualitative studies still took the nonparticipants method, which is the situation when the researcher takes the position as an observer while the participants did not know they are being investigated. Most studies on CALL take an observation form; that is, a teacher is an observer not to manipulate the computer during the instruction (Amstrong et al., 2005; Beauchamp, 2004; Cogill, 2002; Schmid, 2006). To bridge the

gap between academic research and classroom practice, teachers' engaging in classroom research is the best solution to fill the gap between the research and practice; meanwhile, deriving insights from both positions as teachers and researchers.

Case studies on IWB

According to Yin (2003, p.13), case study is "...an empirical inquiry that investigates a contemporary phenomenon within its real life context." Also, Burton (2000) points out that a case study is "...an event such as some aspect of organizational change, or implementing a new programme" (p.177). Through case studies, teachers can personally involve in the research and gain insights for integrating the interactive whiteboard technology to the context. They could also investigate the process of personal pedagogical change and students' individual learning process to provide a real-life perspective in a complex classroom environment (Amstrong et al., 2005).

Two studies conducted by teachers as researchers have generated reflections on the impact of IWB instruction (Hodge & Anderson, 2007; Mohon, 2008). Hodge and Anderson's research was in a primary school, whereas Mohon's was in a secondary school. During the studies, both teachers used journals to record their pedagogical changes, and they found that with the longer time training and using IWB, more interaction and benefits could happen in class. In conclusion, they both had a positive view on integrating IWB in the classroom. However, as Mohon (2008) stated, "The complexity of the classroom environment means that how one teacher uses the IWB cannot be applied to every situation" (p.310). Extending her idea, integrating IWB in the EFL context requires investigation.

Comparison of previous IWB studies

IWB teaching has now been a popular issue in Taiwan. To date, the MOE of Taiwan has been optimistically promoting IWB instruction at schools, and many researchers have done studies on the impacts of using IWB in the language classrooms. So far, there are twenty-three theses about using IWB for English instruction and its effectiveness in the Taiwanese classrooms (Chang, 2010; Chang, 2011; Chen, 2002; Cheng, 2009; Fang, 2012; Gong, 2011; Hsu, 2010; Ke, 2012; Kuo, 2012; Li, 2012; Lin, Y. S., 2010; Lin, H. Y., 2010; Lin, H. Y., 2012; Lin, W. W., 2012; Liao, 2010; Su, 2012; Wang, H. H., 2011; Wang, S. H., 2012; Wen, 2009; Wen, 2010; Yang, 2012; Yu, 2009; Yu, 2011). Among the studies, twenty of them investigated elementary students while only three studies investigated junior high students. All of the authors found that the participants enjoyed better learning achievements and held positive attitudes toward the IWB instruction. All of the studies also emphasized the ‘effectiveness’ of IWB instruction. However, all of them neglected the processes and the experience, which is a great lack of these studies.

The crucial findings from the prior studies reported are that IWB instruction was beneficial in terms of the students’ interaction with the multimedia sources and rapid transformation of lessons, yet there was no promise for the change of pedagogy by teachers (Gillen et al., 2007; Glover et al., 2007; Wall, Higgins, & Smith, 2005). Nevertheless, teachers are the key to how IWB may be used since they are the ones who make adaption to fit their classroom practices in order to take most advantage of the technology (Glover & Miller, 2002; Kennewell & Beauchamp, 2007; Schuck & Kearney, 2007). Although much efficacy can be seen of the IWB instruction in the previous studies, the overuse of teacher-controlled teaching could reduce students’

motivation toward the assisted tool. Therefore, when integrating IWB into the language classrooms, the essential factor is that teachers need to change their roles from dominators to facilitators using learner-centered approaches.

Learner-centered and cooperative learning

Türel and Johnson (2012) pointed out, after analyzing related studies, that students had effective learning if IWB instruction was learn-centered. McCombs and Whisler (1997) defined learner-centeredness as following:

The perspective that couples a focus on individual learners (their heredity, experiences, perspectives, backgrounds, talents, interests, capacities, and needs) with a focus on learning (the best available knowledge about learning and how it occurs and about teaching practices that are most effective in promoting the highest levels of motivation, learning, and achievement for all learners).(p.9)

The 12 principles for the concept of learner-centeredness were first composed by the APA Task Force on Psychology in Education (1993) and later developed to 14 by the APA Work Group of the Board of Educational Affairs (1997). The model of learner-centeredness includes four factors: cognitive and metacognitive factors, motivation and affective factors, developmental and social factors, and individual differences factors. Followings are features of these four models:

1. *Cognitive and metacognitive factors* that relate to the constructive nature of the learning process and the value of helping learners to become more aware of their thinking and learning.
2. *Motivational and affective factors* that relate to the influence of emotions and the interest of the student in learning.

3. *Developmental and social factors* that emphasize positive learning climates and relationships in establishing a social context that facilitates meaningful learning, and also focus on identifying developmental differences within and among learners.

4. *Individual differences* that relate to basic principles of learning and the identification of unique individual attributes that determine effective learning modes for different learners. (Salinas & Garr, 2009, p.2)

These principles provide a framework that teachers could use as a guide as they implement learner-centered teaching approach.

Based on the idea of learner-centeredness, teachers should give students more responsibility to learn, transferring the teachers' own position from being knowledge givers to facilitators in the classroom (Nonkukhetkhong, Baldauf, & Moni, 2006). If teachers could do so, sizable studies have showed that both teachers and students tend to have positive views on learner-centered approaches and derive positive effects on learners' autonomy (Anton, 1999; Huang, 2006; Kavanoz, 2006; Meece, 2003; Nonkukhetkhong, Baldauf, & Moni, 2006; Salinas & Garr, 2009; Yilmaz, 2008).

Another approach based on learner-centered learning is cooperative learning. Cooperative learning is that students work in a mix ability group to achieve the mutual goals together (Johnson, Johnson, & Smith, 1998). There are five basic elements of cooperative learning, including positive interdependence, individual accountability, face-to face promotive interaction, social skills, and group processing. According to Johnson and Johnson (1994,

¶ 6), the definitions of the five elements are as below:

1. Positive Interdependence: The first requirement for an effectively structured cooperative lesson is that students believe that they "sink or swim together."
2. Face-to-Face Promotive Interaction: Promotive interaction may be defined as individuals encouraging and facilitating each other's efforts to achieve, complete tasks, and produce in order to reach the group's goals.
3. Individual Accountability: When the performance of individual students is assessed, the results are given back to the individual and the group, and the student is held responsible by group mates for contributing his or her fair share to the group's success.
4. Social Skills: In order to coordinate efforts to achieve mutual goals, students must: 1) get to know and trust each other, 2) communicate accurately and unambiguously, 3) accept and support each other, and 4) resolve conflict constructively.
5. Group Processing: Group processing may be defined as reflecting on a group session to: 1) describe what member actions were helpful and unhelpful, and 2) make decisions about what actions to continue or change.

Much efficacy of cooperative learning can be found in many studies, which show that cooperative learning could enhance students' performance in learning, improve the students' attitudes toward the subject and their self-esteem, increase students' interactions and peer-related encouragement (Slavin, 1991; Erdem, 1993; Shin, 1993;

Johnson & Johnson, 1994, 1997; Liang, 1996). From the studies, cooperative learning can make the students work more effectively if the teachers integrate it into the class well. Furthermore, Littlewood (1992) pointed out that students could benefit more if they cooperate with one another and engage in the roles more actively. Some research findings also suggest that cooperative learning is beneficial to English learners and the students have positive attitudes toward it (Long & Porter, 1985; McManus & Gettinger, 1996; Gömleksli, 2007).

Although many benefits could be derived from the IWB instruction and CALL, there was a lack of qualitative studies to provide detailed observation that do not exclusively focus on the effectiveness of the IWB. Hence, a case study on IWB for English instruction is needed to explore interaction between students and the teacher. This study investigated the interaction in the context of a junior high school, during the intense learning environment of the 9th grade as students faced the high school entrance examination. Under this special circumstance, a case study was conducted through careful data collection, analysis and assistance with two observers to provide insights of the process through IWB teaching in an English classroom.

Chapter Three

Methodology

Research paradigm

The study was conducted as a case study. A case study is an appropriate mode of inquiry that has a qualitative orientation, and it is useful for small-scale research projects (Terreni, 2009, p.31). For the purpose of this study that aimed to understand how an IWB-supported instructional plan could be implemented in a real-world classroom, a case study is considered most appropriate.

Context and participants

The context

This study was conducted in a junior high school located in an urban district of the Taichung city. There were altogether about 1314 students in forty-six classes and twelve English teachers, which constitute a medium-sized municipal school. Three IWBs were installed in the three classrooms at the Administration Building about two years before the study. However, none of the IWBs had been used by any of the teachers in the school before this study. That IWBs were not used at all highlights the importance of the study.

The teacher/researcher

The teacher/researcher in the study had seven years of English teaching experience in this particular school and had already had one-year experience teaching the student participants. Thus, she had some understanding of the class and a certain degree of rapport with the students, which stood as a good foundation for this study.

On the other hand, the researcher also had some expertise in computer assisted language learning, having taken a course on *Computer-Assisted Language Learning* in a graduate program. In addition, she attended a three-hour IWB workshop in the previous school year. To gain more confidence and expertise in teaching with IWBs, the researcher also developed more skills in using and applying IWBs with the assistance of the school's Section Chief of Information Technology at the beginning of the new semester before data collection. Furthermore, the researcher had asked for more advice about IWB teaching from an experienced English teacher who worked for another school in the city that is specialized in Educational technology (i.e., as a so-called "Information and Technology Advance School") and who had used IWBs as an instructional tool to teach English for about one year. Also, both the Section Chief of Information Technology and the experienced English teacher from the school agreed to serve as observers to provide more objective insights after class. With the full preparation in hand, the researcher was ready to start the study.

Participants

Two classes were chosen for the IWB instructional plan. Class A consisted of 14 boys and 17 girls while Class B consisted of 16 boys and 16 girls. The students were divided into four-student groups. That means there were eight groups in each of the two classes, and there were only three students in the eighth group in Class A. Also, these participants belonged to an intact 3rd-year class (9th graders), who were under great pressure of preparing for the high school entrance exam called the Basic Competence Test (BC Test) in May.

The reasons why these students were chosen as the participants were as following. First, though most of the students were from lower income families and

had low achievement in English, most of them were still willing to engage in English learning. After teaching them for one year in their eighth grade, the researcher felt that they had some improvement. Among these students, some had very little or even no interest in English. However, some other students did have had high achievement in English. With the IWB as a motivating tool, the teacher/researcher expected that they would all become interested and achieved some learning gains. Second, of all three classes that the researcher taught, these two classes of students had relatively more even levels of performance and scores, rather than having some highly achieved learners or extremely low achievers as the other one. The researcher assumed that the intermediate-level learners would engage in learning better during the process. Third, none of the students had been instructed with IWBs before. The study was a totally new experience for them.

Four groups were chosen from the two classes to be the focus of the study. The reason why the four groups were chosen was on the basis that they represented different aspects of junior high students. The sixteen members were consisting of different characteristics, including being lazy, active, passive, and so on. The researcher believed that these students' reactions could represent most junior high students when they encountered the learner-centered plan. Moreover, the four leaders had different leadership styles which could affect the groups' performances. The leader of Group A was a teaching assistant who struggled to make her teammates share some work with her to achieve the tasks; while the leader of Group B was interested in and good at computer work; he tended to take the overall control of his group. The leader of Group C was active in class but had poor leadership skills in accomplishing the tasks; while the leader of Group D put much effort in making two

low achievers cooperate with her to complete the tasks. Analyzing their performances during the tasks, the researcher will have more in-depth discussion in the next chapter.

Data collection

The study used a variety of data collection methods. The data set was comprised of the teacher's logs, classroom interaction video data, observers' interviews, and a group interview with the participants at each cycle of the project.

Teacher's logs

The teacher/researcher kept a log for each class to describe the teaching process of using IWB on the one hand and recorded her own reflection on the other. The reflection was used to analyze the teaching method, procedure and interaction among the teacher, the students and IWB in every class. The log was kept until the end of the study, which is the end of the semester.

Classroom interaction video data

In order to get more information about the interaction between the teacher and students, between the teacher and IWB, as well as between students and IWB, a digital video recorder was used to record the teaching process and interaction in every class. The function of the digital video was for a closer investigation of the teaching procedure, facilitation of reflection by the teacher/researcher, and for observers to examine and discuss issues and problems that might have emerged in the class. Every digital video recording was used to determine necessary modification for the teacher/researcher's instruction throughout the whole IWB teaching project.

Interview with the two observers

During the course, the researcher invited two experienced teachers to observe the class and discussed the teaching process with the researcher afterwards. One was an

English teacher who had been teaching English for twenty years, and the other was the Section Chief of Information Technology of the school. Both of them were the researcher's colleagues and were able to provide honest opinions about the instruction.

The two observers also observed the class when the students did the presentation tasks. After the class, the teacher/researcher had a discussion with them to seek more suggestions for the following class and task. The English teacher observer provided her opinions about the teaching process and interaction between the researcher and her students, while the Section Chief of Information Technology emphasized the students' utilization of the IWB during their presentation tasks.

Semi-structured group interview

There were three cycles of tasks for students to do their review task. After each cycle, the teacher/researcher had an interview with each group. The questions were as follows:

1. The students' reflection about the review task.
2. How did they prepare for the review task?
3. Ways to improve their task.
4. Opinions and suggestions about the IWB instruction.

Each of the interviews was conducted in Chinese and lasted for 45 minutes. Also, if the students had some suggestions about the teaching methods, they could point out their views at that time. The interview was audio recorded as one of the data set to be used for analysis. Through the interviewees' viewpoints, the researcher discovered perceptions to address the research questions. Besides the interview sessions, the researcher also had some informal interviews with the participants after English class.

That is, in order to gain more opinions from the students, the researcher usually asked some students their thoughts about the IWB instruction on that day and the process or problems they faced when preparing for the coming presentation tasks.

Procedure

This study was conducted during the fall semester of 2010, with three cycles of implementation and data collection. A lesson plan (see Appendix I) based on the school-mandated textbook and task-based teaching method from Ellis (2003) was designed for the purpose of this study. The three cycles of data collection mainly occurred at the end of every three units of instruction when the student teams were responsible for designing and conducting a review session in class. In other words, the instruction for three units was completed before the monthly test, and in order to help the students prepare for the test, three groups of students were responsible to lead the review session and did the review task with the IWB under the teacher/researcher's help. Although the three review sessions were the focus, the complete nine units of instruction and classroom interaction were recorded in video and the teacher/researcher kept a reflection log throughout the whole semester.

The complete procedure is presented in this section: At the first class, the teacher/researcher announced to the two classes that all students were required to work in groups to design and conduct a fifteen-minute review session with the IWB before each of the monthly test. Before that, they were required to do a five-minute presentation based on the extension activity from unit 2 to 9. For example, the task of unit 2 was that each group chose the capital of a foreign country and did a weekly weather report. Furthermore, the teacher also announced that the presentation would be part of their final scores in order to make them become serious about the tasks. The

teacher chose eight higher achievers as group leaders. Each group leader had to choose three other students to form a group which had to be consisted of both genders. The class then decided the sequence of the review tasks (i.e., Group 1 was responsible for unit 1 as their review task). However, since there were only eight groups in each class, the teacher was responsible for reviewing unit 9. After the teacher explained all the rules of the presentation tasks and the sequence of group presentation determined, the teacher and the students then negotiated the format and the ways to use IWB in completing the tasks.

The purpose of the five-minute presentation tasks was to help the students become familiar with the functions of the IWB and gained some experiences of doing tasks. Before teaching a unit, the teacher and the students negotiated and decided the topic for the presentation and then the students had to do the presentation task in the next class after the unit was taught. However, the students did not need to do the presentation tasks for unit 1 and unit 6 for that the students had already finished unit 1 during the summer vacation and before the study began. Also, the schedule was too tight for the second monthly test, so the teacher cancelled the task of unit 6. Therefore, there were altogether 7 presentation tasks and 3 review tasks in the plan. The complete plan for the presentation tasks of the IWB instruction is presented in Table 3.1. The three review sessions were taken as data sources for the current study.

Table 3.1 The *lesson plan of the presentation tasks*

Unit	Student Tasks
1	(None)
2	Weather Report
3	Classified Aids

Review (Data Source)	Review Task: Units 1-3 (Groups 1-3)
4	How to reject a boy/girl's love confession
5	Book Review
6	None
Review (Data Source)	Review Task: Units 4-6 (Groups 4-6)
7	Issues about arguing with parents and how to solve the problems
8	Introduce a country and its characteristics
9	Zodiac Signs
Review (Data Source)	Review Task: Units 7-9 (Groups 7-8) while the teacher reviewed unit 9

During the subsequent teaching day, the teacher used IWB to teach the lessons, which also intended to be a demonstration to the students as to how it is possible to enhance class interaction with IWB. The presentation tasks offered students the opportunity to gain more experience with the IWB interaction as well. In other words, each group did at least two presentation tasks during the instruction before they did the review task. Moreover, in order to make sure that the students really understand how to accomplish the required task and use the IWB, the teacher gave each group one class time for consulting, which was forty-five minutes, before their designated review session. This consulting meeting meant to have some discussions with the

students and give them necessary advice. A group interview was also held with the group immediately after the review session to understand the students' attitude and perception toward the task. All the discussions and interviews were audio-recorded for analysis.

Data analysis

The data analysis was interpreted in nature. At each cycle of the implementation, the researcher transcribed and analyzed the data as soon as possible after data collection to identify important themes, which then helped the researcher understand how to make necessarily changes to the subsequent cycles of implementation. There are two ways to guard the trustworthiness of the study. First one was that the study was a long term study and had triangulated data. The second one was that there were two observers to help the researcher maintain a balanced view and exclude the possibility of bias.

To answer the Research Question One: *To what extent did the students accept the learner-centered requirement in the instructional plan?* The teacher' log, digital video, observers' interviews, and group interviews provided the teacher/researcher's and participants' insight toward the IWB instructional plan.

As for Research Question Two: *How did an English teacher and her junior high students collaboratively implement an IWB-supported instructional plan?* The researcher compared and contrasted the data and themes derived from the teacher's log, video data, and observers' interviews to reconstruct the experience.

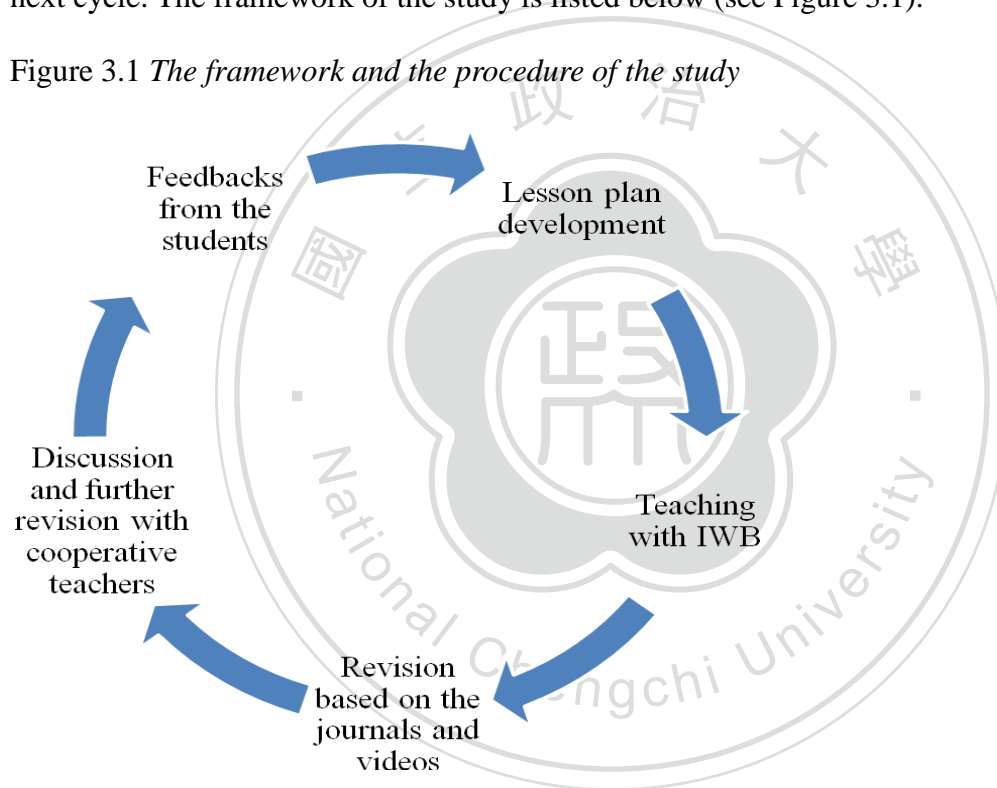
For Research Question Three: *After three cycles of implementation, what insights did the teacher/researcher derive from the experience which helped her think [differently] about her existing teaching practice?* After one semester's IWB

instruction, the teacher/researcher derived insights from the data collected from her logs, other teachers' comments, and students' views to address this question.

The framework and the timeline of the study

A lesson plan (See Appendix II) was developed for the task to be used for the first cycle. After teaching with IWB for a while, the teacher/researcher found some problems from analyzing her logs, videos, observers' interviews and students' opinions. Then some adjustment and revision were made into the lesson plan for the next cycle. The framework of the study is listed below (see Figure 3.1).

Figure 3.1 *The framework and the procedure of the study*



Overview of what are to be presented below

In the next chapter, the researcher first gave an overview of the two classes and then an introduction to each of the four chosen groups and their presentation styles. The researcher also analyzed the learning styles, process to prepare for the presentations and the attitudes toward the IWB instructions of all the group members from four groups in sequence. Finally, the researcher summarized her viewpoints

derived from analyzing the performances of the participants during the IWB instruction.





Chapter Four

Findings

In this chapter, the researcher first gives an overview of the two focus classes and then provides an analysis of the interviews with two groups of students from the two classes to obtain an understanding of their viewpoints and experiences with the IWB instruction.

Overview of Class A

Since the original homeroom teacher of Class A left in their ninth grade, the students lost their learning interests and the atmosphere worsened because of the conflicts among them. The researcher started teaching Class A when they were eighth graders. In the seventh grade, their English teacher was a substitute teacher who was less experienced and did not have effective classroom management skills. Their homeroom teacher was an experienced Chinese teacher and took very good control of the class, which made them have the best performance on the subject of Chinese among all other school subjects. Actually most of the students in Class A did not have interests in academic work; they often could not focus, chatting through most of the class time. At the eighth grade, the researcher started teaching them and cooperated with their homeroom teacher well in making them memorize vocabulary words and pushing them hard to study English. The researcher also put much effort on pushing them to study hard and gradually the students' grades improved. However, there was a major problem—the students seemed not willing to give responses or answer questions in class; it always took them a lot of time to come up with responses to the

teacher's questions. Their homeroom teacher said, "I asked the students to keep quiet in class; otherwise, they would be too noisy. And it would definitely drive you crazy". That was probably why they tended to keep quiet and gave no responses at all in class. After the teacher taught Class A for a year, the students seemed to get used to her new instructional style and started to enjoy a positive relationship. Unfortunately, at the new semester of their ninth grade, the students had a new homeroom teacher. In fact, at the beginning of their ninth grade, almost all of their teachers of all subjects were changed except the teacher/researcher for various reasons. Since then, their learning environment and studying attitudes changed as well. Some subject teachers kept asking me about my impression of teaching this class because they thought the students were noisy and inattentive. These teacher said to the teacher/researcher, "Do you think that the students' learning attitudes changed since the new teacher came?". They also said "We talked to the homeroom teacher many times to discipline his students during our instruction, but the situation stayed the same. The students were still making a lot of noise in class." They thought that it should be the homeroom teacher's duty to control and set everything in order to let the subject teachers teach the class more easily.

Some other problems also arose in this class since then. The first problem and also the most serious one was conflicts among the students. In the ninth grade, the content of the English class that the students needed to study seemed too difficult for some of them, who then gave up on making any effort and started constantly engaging in small talks in class. The other students became annoyed being disturbed during class time. So the students divided themselves up into two opposing groups and had complete estrangement between each other ever since. The most obvious conflict

happened on the school anniversary sports day. Some students rejected to take part in the relay race because they thought most contestants belonged to the opposing group; they did not want to be in the same team with their opponents. This not only worsened the situation but also made the class atmosphere and most students' grades became lower than those they obtained in the eighth grade.

The second problem of Class A was that not all the students participated in this IWB plan. At the beginning of the new semester in the ninth grade, three students who belonged to the school basketball team were often absent from class because of some basketball games which they had to be part of, and thus they did not join their groups much in preparing for the IWB presentations. In the first semester of the ninth grade, the teacher/researcher had all the students do five-minute presentation tasks as practices for the review task. There was one theme in each unit, and the teacher/researcher and the students thought of one topic to do the presentation task after that unit was finished. Besides the presentation task at the end of each unit, groups were also assigned to do a fifteen-minute review task for their classmates at the last class before each monthly test. There were nine units in the book and one review task, so there should be ten presentation tasks. However, unit one was finished in the summer vacation when the teacher/researcher asked for a study leave and the project had not been executed. There was not enough time to do the presentation task of unit six, so it was cancelled. Therefore, there were eight presentation tasks including the review task. Among those three basketball players on the school team, only one was present at most of the presentations, while the other two were constantly absent from class during the semester. In the interview session, the students who belonged to the same group as those basketball players expressed that they would

rather do the presentations without the players. The players did not offer much help for the groups either, and thus it made no difference with or without their participation for their teammates. Also, because one of basketball players had serious conflicts with his teammates, he usually gave some excuses and not to show up on the presentations.

Besides the two basketball players, there were two students who also started to be absent from the class. At the beginning of the new semester in their ninth grade, there were two students who would not show up in classes until ten to eleven o'clock in the morning, which was actually the third or fourth class of the day. Gradually, they went to school much later and then eventually became dropouts in the middle of the semester. These students had some family problems and were not interested in school at all. One of these students still appeared at most of the presentations until December, i.e., two thirds into the semester, while the other never appeared. At the interview after the review task, I asked one group if they had told the student who was absent on the review task day. They said, "We saw him yesterday after school and told him that we had a review task. But, he just gave us candies [as the reward to students who answered the questions correctly], and then leave without responding whether he would show up or not." The group members continued, "We had become used to these members' being absent. It did not make any difference whether or not they showed up in the group."

To sum up, Class A could be considered a dysfunctional class. The high achievers in this class studied hard and did well no matter what happened, and while more and more students seemed to lose interest or even gave up on studying. Of course, their grades suffered. Luckily, students whom the teacher/researcher chose to be the leaders of the groups were hard-working and had strong leadership skills.

When the teacher/researcher started using the IWB instruction and asked all of the students to divide into groups, all leaders were able to make their group members work together and complete assigned tasks even though there were some really low achievers in the group.

Below is the Timeline of Class A

Grade	Situation
7 th	The class was with a substitute English teacher who was not effective in terms of classroom management. They became noisy, lacked classroom discipline, and could not focus.
8 th	The researcher started teaching them English and cooperated with their homeroom teacher to improve their performance in terms of discipline and their studies. However, they did not have much response during class time. Later, the researcher found that this was because of their homeroom teacher's strict classroom management.
9 th	The school changed all of their teachers except me, including their homeroom teacher. The students became noisy and inattentive, and the situation became worse than that in the seventh grade because of conflicts between groups. Some students became dropouts. It was in this situation that the teacher/researcher conducted this IWB action research.

Overview of Class B

Lack of discipline and learning motivation were two major problems in Class B. The similarity between Class A and B was that they had the same substitute English

teacher in the seventh grade. The same problem arose in this class — the teacher had ineffective class management which made the class always in a state of chaos and the students were inattentive during class time. The researcher started teaching Class B in their eighth grade, which was the same time as Class A. However, the class atmosphere was completely different from Class A. The teacher in this class when they were 8th graders was very experienced, and the way she conducted her class was not strict. She was seldom in the classroom when homeroom teacher were supposed to be there, for example during self-study period or lunch break. Sometimes she was absent from the individual study period in the morning. The rather loose way of class management made the students fool around and get themselves into trouble. They would throw pieces of paper or trash to one another and have fun with water during break time. In class, the students were active but they were actually quite passive in their studies. The number of students who did not finish their homework was always large and the average grade was lower than that for Class A. Yet, compared with Class A, there were more high achievers in Class B who would respond to the teacher/researcher's questions and who liked to express their opinions, while some low achievers might lose their attention easily and ended chatting with those who sat around them in class. When the teacher/researcher taught in this class, she usually spent less time talking about additional topics comparing with the other classes because students would immediately change the topics into something they could chat about and the classroom would be immediately became noisy and out of control. Students in Class B also did less well in their examinations because there were more students who did not pay attention to their study. English became more difficult since the eighth grade, more and more students in the class gave up on their learning and

gained lower grades than they could. The most obvious incident was that there were more students only willing to fill in numbers in the multiple choice section on the tests. In fact, they often wrote some random numbers and then fell asleep. For the high achievers in this class, though they still received good grades from tests, they did not have better performance than that of other high achievers in other classes. Also, the mean score in Class B was lower than that in Class A. The differences among students' proficiency levels were too large that not only made the IWB instructional plan more difficult but also caused some problems when they did the task.

With more low achievers in this class, the teacher/researcher usually had to slow down her instruction and explained the content many times for them. In addition, since the students liked chatting in class, the teacher/researcher had to spend some time disciplining them. The two focus classes had one thing in common — the frequent absence of some students. There were three students in Class B who were usually absent from the class and did not join their groups much. One of them usually came to school at noon or in the afternoon, while the other two came one day and were absent for two days. These students happened to be very low achievers. When preparing for the presentations, the group leaders often excluded them from their groups as if they were not part of the group. Like Class A, in the interview session, the group members said, “It did not matter if they [those absent students] appeared in the presentation or not.” In short, the main problems of Class B were the absence of three students and the existence of more low achievers compared with other classes.

Another problem of Class B was that the two high achievers whom the researcher chose as the group leaders could not take control of their groups because of two reasons. First, the low achievers were not willing to learn English; they were not

willing to cooperate with the leaders to complete any tasks which they did not have any interests in. Second, some of the group leaders did not have good relationships with the other students, so group members did not want to cooperate with the leaders. This situation led to the failure of some presentation tasks. These two major problems: the absence of three students, more low achievers and poor leaderships of some group leaders made Class B difficult to implement the IWB instructional plan and complete the presentations.

Below is the Timeline of Class B

Grade	Situation
7 th	The same substitute English teacher as Class A, who was not effective in terms of classroom management. The students became noisy, poor in classroom discipline, and could not focus in class.
8 th	The researcher started teaching them English at the 8 th grade as Class A. The researcher cooperated with the homeroom teacher to improve their performance in English as well. However, because of the homeroom teacher's loose way of conducting her class, the students did not gain better grades compared with Class A. Yet, most of the students had better learning attitude, and they often responded to the teacher/researcher's questions actively.
9 th	More students gave up on their study and gained lower grades than they could than before. Thus, fewer students paid attention to the teacher/researcher's instruction and only some who were active learners had responses in class. Among those students who were not interested in their studies, three of them gradually moved from

	<p>being late from class to completely drop out of school. The frequency of failure in doing the presentations was high in the class because the group leaders did not cooperate with their teammates well to prepare for tasks. Under the circumstance, the teacher/researcher started her IWB instructional plan.</p>
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The table below (Table 4.1) compares two focus classes, Class A and B.

Table 4.1. *The comparisons of the two focus classes*

	Class A	Class B
The atmosphere of the class	The students were used to be quiet and often gave no responses in class.	Some students responded the teacher's questions while others engaged in their own talks.
The description of the students	More high achievers and better grades in comparison with Class B	More low achievers and lower grades in comparison with Class A
The difficulties in doing the IWB tasks	The disagreements and conflicts in the class caused four students to be absent purposely from the class and the presentations.	Some group leaders did not have good leadership skills and their relationships with the other group members made some of the presentation tasks failed.

After giving an overview of two focus classes and the comparison of them, the researcher now gives an introduction and discusses the presentation style of Group A. Also, the researcher will analyze the learning style, process to prepare for the presentations and the attitude toward the IWB instruction respectively of each group member during the whole semester.

Class A Group A

Overview of Group A

The four members of Group A were Tina, Tim, Zoe, and Jean. The leader was Tina, who was also the teaching assistant. She was a typical active and hard-working learner. She led the other three students to complete the presentation. The boy member, Tim, always had low scores on English and rejected to answer questions in class. He made great progress throughout the presentations: from never answering the teacher's questions to saying English words in front of the others on the review task. Zoe, the third member of the team, was not good at English as well, but she obeyed whatever Tina said and cooperated with her to present though she was having a sick leave at the review task. Jean, the last member of the team, was a student with a satisfying English proficiency level, since she had gone to an English cram school at elementary school. However, she was absent for three out of the eight presentations that her homeroom teacher said she did not come to school for no reasons. In conclusion, the group leader, Tina was responsible for the most jobs to do all the presentations in the plan while others tended to do the work passively or being absent on the presentation day. After a brief description of Group A, following is the presentation style of Group A which the researcher observed from their review task. From the performance, there was more detailed cooperation style between one another of the group.

Presentation style of Group A

Group A was the third group to do the review task in the first cycle. They started their presentation by reviewing the new vocabulary words of Unit 3 which they were assigned. First, the group leader, Tina, read each English word and the Chinese meaning of it once, and then she added her own supplementary words which related to the listed vocabulary. The second part was the compound words. The third part was the synonyms of some of the listed vocabulary. These two parts were reported by Tim. After reviewing the vocabulary, the next part was to review the sentence patterns embedded in the unit. Tina taught the grammar sentences of the unit first and had Tim read the example sentences. After that, Tina read out loud to the class the rules and the usages of the grammar – present and past participles, and the Chinese explanations. The final part was that Tina asked five questions about the prepositions of each past participle as the end of their presentation.

This group spent three minutes on reviewing the vocabulary words by reading out loud and some supplementary words. After that, they used four minutes to explain the grammar to finish their reviewing. When they completed the review presentation, Tina started to ask her classmates which preposition was collocated with the past participle that she gave. She picked some students by choosing the sticks which the teacher used having their student numbers on for the Q& A to be the last part of the presentation.

There are some problems to be noticed in this presentation. First was about the data that Group A prepared for the presentation. Group A prepared the PowerPoint file to show their content and the IWB was treated as a screen to do the display. They did not use other functions which IWB offered, such as those on the tool bar for emphasis.

Second, there was no interaction with the audience. The first presenter, Tina, only read the words out loud; she did not ask the other students to practice, drill or interact with them in other forms. Instead, she only read the content without noticing if her classmates paid full attention. Tim, also read the content without looking at his classmates. Third, Tina's asking the audience to answer questions by drawing lots was actually an imitation of the teacher's behavior at the English class. Although when she drew some students to answer her questions, and a few of them could not answer, Tina did not do anything to help those students; instead, she continued drawing more numbers until someone could correctly answer the questions.

Though this group did a five-minute IWB presentation after each unit was taught, they obviously did not know how to do a presentation and interact with the audience. They also could not make the most of the IWB because they used it only as a screen connecting to the computer. For the students, doing a presentation means making a PowerPoint file and do the oral narration. They did not value the importance of interacting with the audience. Because students did not have experience of doing the presentation, they imitated what the teacher did most of often in class. The process Tina drew lots to ask her classmates questions was the typical process that the teacher/researcher did in class. The presenter tried to take the teacher's role but was not aware that having an interaction with the class was essential during instruction. Since this was their first time to experience a presentation, all they could do was imitate teaching based on their perception and interpretation. What follows are more in-depth discussion of the four students' situations. Hopefully, readers can gain more understandings from their learning process through the IWB instructional plan.

Tina

Learning style

Tina was the teaching assistant when she was in the eighth grade. She was a high-proficiency student, and she had high motivation in learning English. Also, she took care of things carefully, which was the reason why her homeroom teacher assigned her to be the teacher/researcher's teaching assistant to help collect the homework, arrange the dates for tests and record the scores when the teacher/researcher took over their English class. She was an active learner; whenever she had questions, she would ask the teacher immediately after class. Also, she was the one that always responded to the teacher/researcher's questions and read the text the loudest in class while others read it with low voice or kept quiet. Tina was a typical hard-working student and always obeyed the teachers. She was always the first one to hand in her homework, which was always perfectly done and with nearly no errors. After submitting her homework, she would immediately collect other students' homework and noted down missing homework for the teacher. Besides going to cram school, Tina would also spend time doing additional exercises in the reference books to improve her English ability. She was a truly an autonomous learner.

Process to prepare for the presentation

When the teacher/researcher first announced that there would be the IWB instruction and the students had to prepare for the presentation for the whole semester, all the other students started wailing and complaining about it because they had never done a presentation like that, let alone presenting in English. Among all the distressing facial expressions, Tina showed that though she had no confidence she would give it a try. After the teacher/researcher explained some details about the

project, assigned the group leaders, and had them choose their own group members, Tina came to the teacher/researcher first to ask for more details about how to do the presentations and what the group leader should be responsible for.

Before the presentation day of each task, the teacher always asked the students to email their files to the teacher in advance so that the teacher could correct their grammar and vocabulary errors before they did the presentations. This would also ensure that no time would be wasted in managing flash drives at the presentation. However, at the beginning of the project, some students still brought their files in flash drives at the last minute while Tina always sent the teacher her files ahead of time. Once the topic was decided for the presentation task, Tina would do the research and completed almost all the computer work because the other members did not want to do much. Also, she would consult with the teacher/ researcher about her ideas for the presentations and often took her own laptop to show the teacher/ researcher her files and ask the teacher/ researcher to correct her errors or give her some advice. Among all the students, Tina was the most active and did the most work for the presentations.

Attitude toward the presentation and IWB instruction

In the interview after the review task, Tina expressed that her review task was not good enough. She thought if she could prepare it more, it would have been perfect. Meanwhile, Tim and Zoe, who were supposed to be responsible for reviewing the words for the unit, actually knew only a little English and could barely recognize the words to be presented. Tina had to teach them how to read out loud the words of the unit so that they could do the review. However, it did not occur to her that Zoe would be absent for illness on the presentation day; she did not have time to take care of Tim

and had him learn to read all parts of the words that Zoe was supposed to do. This caused Tim make some mistakes at the presentation. Also, she had to take over Jean's job at the presentation because of her absence as well. Though, there were some trouble at her team's presentation, her general impression of the IWB instruction was positive. She could also notice some problems with the IWB instruction. She offered the teacher/ researcher some opinions in her interview.

I think it's ok to use IWB for English instruction and it was fun, but whenever the light was turned off, the students who sat in the back of the classroom would start doing their own things. And I felt that they would fall asleep or do something else at their seats. (Interview, October 11, 2010)

She also said that when using the blackboard, the teacher could ask some students to write some exercises on the board; however, with the limitation of the IWB, supporting one touch at a time, it was not possible to have more than one student to practice.

From the interview, the researcher found that experiencing the IWB instruction in a learner-centered way was a whole new world to Tina. She never had this kind of experience before, and she liked it because it gave her a new way of learning English through the computer and her own presentations.

Tim

Learning style

Tim's English proficiency was not good because he did not learn well at the elementary school and he did not have much interest in English. Since the teacher/researcher started teaching Tim in his eighth grade, he was often late for handing in his homework for the reason that he did not understand how to do it. In the

ninth grade, the situation became worse. The researcher's description of Class A indicates the learning attitude of this class changed a lot in their ninth grade due to the change of their homeroom teacher. Most of the students' learning attitudes became passive, and Tim was one of these students. The most obvious evidence was his ways of answering questions in class. In the eighth grade, whenever the teacher/researcher asked him to answer questions or do exercises, his answers would always be "I don't know" or "I can't." When the teacher/ researcher heard him refuse to answer questions, she would encourage him to try to answer or even give him some hints. Nevertheless, he still rejected answering any questions. This is of course not acceptable to many teachers. However, in the ninth grade, the attitude became even worse: he would shake his head without saying anything when asked to answer questions. To the teacher/ researcher's surprise, when interacting with the IWB, he was willing to try especially by moving the answers to the designated blocks. From these experiences, the teacher/researcher realized that he could not speak or understand English and he was afraid, so he refused to answer any open questions. But with the choices given at the touch-screen IWB and the attractive functions, he was more willing to try. In conclusion, though Tim was a low achiever and did not pay attention to English in class, fortunately, he was interested in the IWB touch-screen functions, which made him willing to have interaction with it and answer English questions.

Process to prepare for the presentation

As the researcher described previously, Tim was a low achiever and passive learner. At the first presentation, he did nothing but just silently stood with his teammates. Gradually, he was forced by Tina to do some work in the presentation.

Though he started to be responsible for one part of the presentation, he seemed uncomfortable on stage and his voice was so low that the teacher/researcher could barely hear him. After four presentations, he became more used to taking the microphone, but he took it far away from his mouth and only spoke a few words during the presentation. At the review task, he surprised the researcher by reading the whole parts of the new words in the unit which his group was responsible for. In the interview, the teacher/researcher encouraged him and said that she was impressed by his progress and his reading most of the words at the presentation. He responded by just a big smile but said nothing. I asked the team leader, Tina, how Tim did it. Tina said,

I kept training Tim and made him read each word to me. After that, I focused more on training Zoe. Who could have known that Zoe would be absent today? I had to teach Tim some more parts [for the presentation]. Originally, the words were divided into two parts for Tim and Zoe to cover, but Zoe was not here today. Because two team members were absent today, it became chaos. (Interview, October 11, 2010)

From Tina's prescription, Tim was willing to take over Zoe's job; which means that he improved himself by taking some responsibility for his team to support the review task.

After the eight presentations were accomplished, the researcher found that Tim usually did not actively do any job for his group; he would wait for his group leader to assign or force him to do something for the group. Because his English proficiency was too low to prepare any material for the presentation, his job was usually to say a few words or to see the note and then acted out the scene which his group prepared.

After that, he would just stand there without doing anything while the other group members reported. Although throughout the plan, Tim was a passive teammate, he completed the review task and impressed the teacher/researcher by his reading many vocabulary words, which he had never done before. This should be taken as his big achievement.

Attitude toward the presentation and IWB instruction

In the interview, Tim did not say much about his feelings toward the presentation. His group leader, Tina expressed most of the opinions. However, when the teacher/researcher started to praise Tim for his courage of reading the vocabulary words out loud in front of all the classmates, though he felt shy and embarrassed, he smiled. When the researcher asked his opinions about the presentation, he still did not say anything. When it came to the teacher/researcher's IWB instruction, the teacher/researcher asked Tim and Tina if there was something the teacher/researcher need to improve in her IWB instruction, they said nothing. Then the teacher/researcher asked them that comparing with the blackboard, using the IWB reduced the chances for them to do exercises on the IWB. Tim immediately answered, "That's good". This showed that he would not like to be called on to answer questions; he had no interests in English. However, with the IWB interactive functions, he could start trying to have interaction with English. The IWB instruction provided Tim chances to interact with English which he said he did not like. The learner-centered presentation provided him chances to show that he could perform in English in public as well. Compared to the teacher-fronted instruction, learner-centered instruction might have more benefits on him.

Zoe

Learning style

Zoe was also not good at English. She was quiet and seldom talked to her classmates except those really closed to her. The teacher/researcher could barely hear her speaking English for the whole semester. She had poor grades since entering junior high school. Her homeroom teacher said that Zoe came from a low-income family; she could not afford cram school and her parents did not have time to take care of her school work. Unlike some of the other students, she had to take care of her study herself without her parents' help. Although she did not understand the meaning of words and grammar, she still tried to listen to the teacher/ researcher's instruction and borrowed her classmate's book to copy down the answers and highlighted the key points in her book. Because of the limitation of her English proficiency, she could only do some of homework that the teacher/researcher assigned. When she had some homework that she could not do, she just did the multiple choice parts and skipped the rest. This was the same as in tests; she only did the multiple choice sections and left all the other sections blank. Because of her poor proficiency from elementary school and her family's restrictions, she was not able to make progress in English and had no motivation to learn it. Zoe's learning style was thus very passive. However, the fact that she would borrow books from her classmates to mark key sentences and write down answers in the book showed that she was still willing to try.

Process through preparing for the presentation

Zoe's English proficiency was not good enough to do the presentation, but she could cooperate with Tina and she was willing to do whatever Tina assigned. At first, she took the job of finding the information in Chinese, and then she would wait for

Tina to translate the information into English. After that, Zoe typed the translated information into the computer file before the presentation. Gradually, she started participating in the presentation by sharing some oral parts with her teammates. Before the presentation, Tina would teach Zoe by reading each word for her to mark the Chinese phonetic symbols next to each of English word and let her memorize the sounds. At the first few presentations, she was only reading what Tina taught her. Because Zoe could not pronounce each word correctly, she usually brought a brief note with her on the stage when it was her turn to do the presentation, and she always stared at the note and did the presentation without looking at the audience at all. Moreover, Zoe stood right beside Tina in case that she forgot the pronunciation. Tina always helped her immediately when in need.

In most of the presentations, Zoe read the least part of the content. Though the teacher/researcher asked her to use the microphone for the presentation, the other students and the teacher/researcher still could not hear her voice clearly. In the teacher/researcher's opinion, Zoe was doing the things that she was not good at during the whole presentation tasks, but she still tried her best to do the job she had to do as a group member.

Attitude toward the presentation and IWB instruction

The teacher/researcher asked the group members their opinions in the interview after the review task before each monthly test. However, since Zoe was absent because she was sick that day, she could not answer the question. This was the only time she asked for a sick leave during the eight presentation tasks in the whole semester. Although she was often asked for sick leaves in class, she attended the other seven presentations except the most important one, the review task.

Unlike Tim, who was at least willing to try to interact with the IWB, Zoe would not try to touch the screen at all. Instead, she would rather shake her head, said nothing and then stood at her desk until the end of the class as a punishment no matter the teacher/researcher gave her chances and asked her classmates to give her a hint for the answer. According to Tina, she cooperated with Tina but she could not do much for the presentation because she did not understand much English. From the informal interview after English class, Zoe expressed her opinions about the teacher/researcher's IWB instruction, "I could see the content of the book more clearly [with the IWB] because I did not have to borrow books from my classmates to highlight the key sentences anymore". However, she did not understand the teacher/researcher's instruction at all. The teacher/researcher thought this project made no difference to Zoe especially with her low English proficiency. For Zoe, those presentations were just another homework added in her school life, and she just did what she could do and left most other tasks to her group leader, Tina.

Jean

Learning style

Jean was a student who could understand English easily, and thus she seldom put efforts on her studying. In fact, she could not concentrate in class. She stared at the book but did nothing during the instruction. Her English proficiency level was better than her classmates; according to her homeroom teacher, because she had gone to the cram school during elementary school, which gave her more chances to practice and learn it well. But she quit going there since she entered junior high school. According to Jean's classmates, Jean did not pay attention to her school work, as her wish was to continue her study in a vocational high school in the future, which did not need high

scores to enter. All her English abilities came from the training in the cram school. Her ways of learning English was basically listen to the instruction at school and do the homework. She did not finish some of her homework and was often absent from the class. When the teacher/researcher asked her to do the exercises on the IWB board, she could sometimes do the answers correctly, but when it came to more difficult ones, she was often not able to answer them correctly. In summary, Jean's learning English was only based on the ability which was built in the cram school during elementary school. She did not pay much effort on English now.

Process through preparing for the presentation

Jean was absent three times among the eight presentations including the most important one, the review task. Her job at the rest of the five presentations was mostly to collect data or give a brief introduction at the opening of the group presentation. Jean did nothing for the first presentation and then was absent for the next two. When the researcher asked Tina the reason why Jean was absent, Tina's answer would always be "I don't know. She often asked for a sick leave and did not show up." For the rest of the presentations, her job was mainly to collect data for Tina or do the opening introduction; which was less than one minute. At the review presentation, she was absent again and did not have a proper reason; her classmates did not know why she did not appear. They only said that she was often absent with no reasons or was late for classes in the morning since she turned ninth grade.

In the whole process of preparing for the presentation, Jean was always in the most passive condition. She was absent most frequently in her group and compared with other group members, she did the least work during the whole presentations. Whenever I asked Tina what each group member did after each presentation, she

always said that Jean was responsible for collecting information for the tasks.

Nevertheless, when the researcher asked Tina in private if Jean really did the work, Tina said that Jean did almost nothing during the whole project. To Jean, the way she treated the presentation was the same as her attitude toward her homework; she did not take it seriously or take much effort to do it.

Attitude toward the presentation and IWB instruction

It was a pity that Jean was absent at the review presentation, so the researcher did not have a chance to ask her questions and opinions about the IWB instruction and the opportunity to be responsible for a unit and the presentation. Though the teacher/researcher did not have chances to interview Jean, from Tina and some of Jean's classmates, she complained to her classmates about the troublesome task that she had to do for this project. From Jean's performance during the IWB plan, she did not resist interacting with the IWB, but did not put much effort for her teammates to prepare for the presentation tasks.

Summary of Group A

In this group, the group leader, Tina, took most of the responsibility upon herself to do the most jobs in the whole project. She might be the one who benefited most from this project. The only boy member, Tim, had a great performance at the review task compared to his learning attitude to English. The third member, Zoe, though she had poor English proficiency, she tried to cooperate with Tina to prepare for all presentations as much as she could. However, she did not attend the review task because of her sick leave. The last member, Jean who did not appear at most of the presentation tasks including the review one. Her major responsibility was to do a brief introduction for the presentations, and did not actively participate in the team work.

Tina and Tim showed that IWB facilitated their interests in learning English through the IWB instruction, especially because Tim had no interest in his studies. He showed some interests in interacting with the IWB and was willing to memorize the vocabulary words to read them out loud in the review task which he could not do it before. However, the other two members, Zoe and Jean, seemed not to have benefit from the learner-centered instruction. Zoe was limited by her English proficiency to offer little help for her group while Jean was consistently absent from some presentation tasks. From the teacher/researcher's viewpoint, most members in Group A held positive attitudes toward the IWB instructional plan. It facilitated not only Tim's learning attitude toward English but also Tina's interests in learner-centered instruction.

When Group A did the presentation tasks, they always used the PowerPoint as their material. They used the laptop to change the layout at first to gradually touch the IWB to change it, which was usually Zoe's job. There were a lot of words as description and too many pictures on the layout for the students to understand in most of the tasks. Tina always wanted to show a lot of information for the audience and made the layout too complicated to see. From the presentation tasks which Group A completes, it seemed that IWB was only a screen to project the material they made.

Group B

Overview of Group B

There were three members in Group B: Edward, York, Yvonne, and Serena. In comparison with the leader of Group A, the leader, Edward had more interests in robots than English. He has been interested in studying robots since elementary school, and had much experience of doing presentations at many conferences and

contests. Yet, he did not use the experience in his group work. Another boy group member was York. For the reason that he did not want to put effort in his school work and had serious conflicts with other two group members, he never attended any presentations. Yvonne and Serena were two girl members who were very good friends, and then shared a lot work for presentations together. Their main job was to do the opening or a brief introduction for the oral presentations and left the rest to Edward; which means Edward took the major responsibility and did the most work for all the presentations.

Presentation style of Group B

The first presenter was Yvonne, she read out loud the vocabulary words and the Chinese meanings, while Edward, one of the other presenters used a laser pointer to focus everybody's attention on the word she was reading. After that, Yvonne asked the class to repeat after her. The next part was responsible by Serena, the third member of the team, doing the grammar review by explaining the rules and then reading the example sentences Edward made. After that, Serena taught the supplementary materials related to the grammar point in the unit and read the example sentences as well. She read out loud the sentences in English first and then their Chinese meanings. Whenever she finished reading the sentences, she would remind her classmates some importance concepts of the grammar point again. The last presenter was Edward, who gave the class some multiple-choice exercises as the end of the review task.

Group B took four minutes to review the vocabulary words of the unit by reading them first and then led the class to repeat them. They spent most time on reviewing the sentences patterns. Through the rules and sentences, they tried to make the class understand the key points in the unit. This took them six minutes. And the last part

was some exercises as the ending to the presentation. This activity only took three minutes as the wrap-up for their review task.

Watching six groups presented before them made Group B notice what they should do to have the best performance during the review task. First, after Yvonne read the words, she asked the class to repeat after her. This way, the other students would not be bored by only sitting there and watched their performance. Second, when Serena reviewed the sentence patterns, Edward used a laser pointer to help the other students focus on the material. Third, Edward had his classmates do the practice by choosing the correct answers from five multiple-choices. Compared with Group A, Tina drew the lots and asked students to answer her questions; while there were many students volunteered to answer these questions which Edward asked. The interaction between Group B and the students were better than Group A at the review task.

From Group B's presentation, there are some things that need to be noticed. During the time when Serena explained and emphasized some sentence patterns, Edward used his laser pointer repeatedly point to the words or sentences Serena said. This was also one of the behaviors the researcher/teacher had in class. The difference was that the researcher used the highlighter or the red pen from the tool bar of the IWB to highlight the key points the students needed to pay attention, while Edward used it for emphasizing the words and the sentence patterns they presented. Another interesting observation was that though there were many volunteers answering questions that Edward asked, Edward admitted in the interview that he requested those students in advance to answer the questions. And he promised that they would have candies for rewards. This way, Group B seemed to have better interaction with their classmates because they made some arrangements before the review task to

make it perfect.

Although Edward used the tool to get students' attention, he did not use the tools or functions the IWB provides; instead, he used his own laser pointer. Also, he copied the researcher's instructional habit of circling some important sentences or key points many times for emphasis. Moreover, he rehearsed the practice part before the presentation and arranged some of his classmates to be volunteers. The rehearsal made their presentation more fluently than all the other groups presented before them. Group B had seen some situations happen during the previous six review tasks, and obviously, they listened carefully to the teacher/researcher's advice to those groups. They knew how to avoid some mistakes and embarrassing moments happened during their presentation. This is the advantage of being one of the last groups doing the review task, and they did it more fluently.

Edward

Learning style

As discussed earlier, Edward had been interested in studying and building robots since he was a child. He won many prizes for building robots in Taiwan and abroad during elementary school. Edward's parents fully supported him in his interest, and he learned English since elementary school in order to understand the description and information from magazines and manuals to build robots. English was one of the tools for him to understand robots. His talents and experience of learning English for many years make him a high proficiency learner. He understood grammar and could memorize vocabulary words easily. Whenever he had some grammar questions, he asked the teacher/researcher instantly after class. However, he sometimes forgot to do the homework or made careless mistakes on his homework and tests. When the

teacher/researcher did the instruction, she found Edward easily lose his concentrations; he would stare at his book and did nothing. Edward's classmates said that he was a little bit overly confident. Because Edward understood most of the content the teacher/researcher taught, he actually spent more time on robots than his studies. His two homeroom teachers and the researcher kept encouraging him that if he could study harder, it would be beneficial if he goes abroad for further studies on robots. Yet, he held the same attitude toward his schoolwork. To Edward, the purpose to learn English was to gain more information for his interest. He used the Internet to search for more information about robots, and he also used it to learn English as well. In conclusion, Edward was more technology-oriented in his learning and emphasized on his own interest more.

Process through preparing for the presentation

As a leader, Edward usually completed everything by himself and then assigned the rest parts to Yvonne and Serena to do presentations. Whenever there was an assigned task, he first searched for information on the Net and then typed it up on the computer. He did most of the work just like as the other group leaders; however, he was special in that he was more professional in doing the computer animation. Based on his experience of doing presentations in conferences and contests, the researcher expected that he could have better teamwork with his group members than the other teams. Nevertheless, as the researcher observed, he actually did the whole work alone.

The Internet and the computer were Edward's two essential tools to do research in robots, and he used them for the presentations as well. After finding the information he wanted, he designed some fancy PowerPoint files as his presentation materials. Because of his special background of having much experience presenting his ideas of

building robots in front of judges in many contests in Taiwan or abroad, he knew how to attract the audience by using the magnificent layout on the computer. Hence, Edward focused more on his layout when typing the information into his own computer. His layout was always fascinating, and he prepared his own tools such as a laptop and a laser pointer for presentations. With these tools, once he even helped another group to complete a presentation in class within ten minutes. One group sent their file to the teacher/researcher after the deadline, so the teacher/researcher did not receive their file before the presentation. Edward volunteered to work with that group leader and helped them complete their presentation. From this experience, Edward proved that he had the talent doing presentations, and he also had good instant reaction.

Attitude toward the presentation and IWB instruction

At the interview, Edward expressed, “I thought that preparing for the presentation includes data collection, and that the presentation was difficult.” Though he had more experience than others, he still felt nervous about the presentation. Before the review task, the teacher/researcher asked each group to meet with her and had them show me the file they prepared in order to give them some advice. At the meeting, Edward prepared his own Tablet PC to show the teacher/researcher his file. After brief introduction about his materials, the teacher/researcher suggested he made some corrections to grammar and layout so that the audience could understand better. He corrected them and sent the teacher/researcher the file the next day. This showed that he had positive attitude and was responsible for the presentation. Though he first indicated that he was satisfied with his review task, when the teacher/researcher asked him which part he felt most satisfied with, he changed his mind and said, “ Well,

actually, I felt that if I could make the presentation clearer for my classmates to understand, it would be better.” The reason he said so was because when he was presenting, he felt some students seem confused. So he wished to make the content more clear for others to understand. From Edward’s reflection, we can know that he was very active and positive toward the presentations.

Students, like Edward, who had very strong interests in modern technology, liked the new IWB instruction. Edward thought the advantages of the IWB instruction were that the supplementary words were positioned below each new word for students to understand the meaning better. The functions of checking the answers and the listening practices embedded in it by a single-touch were also benefits. In spite of some convenience that the IWB brought into class, Edward complained that the IWB did not support the multiple-point touch function for more than one student to do exercises on it. He said, “The disadvantage of the IWB was that it did not support the multiple-point touch which could only let one student do the practice. The teacher could ask more students do exercises on the board.” But, he did not wish himself to be called on to do the exercises. In short, Edward had positive attitude toward the IWB instruction because of the tools and supplementary materials embedded in it.

York

Learning style

York came from a single-parent and low-income family which means he had economical problems to take care of, which could distract him from his study. He had poor grades since elementary school. He seemed to be passive in his schoolwork. After entering junior high school, he joined the school basketball team. Hence, he gained encouragement and honor from the basketball team much more than his study

in any school subjects. For this reason, he liked to stay at the basketball team more than in class. In addition, he had to practice basketball for the regional basketball contests during the semester, which made him absent from classes very often and he was gradually alienated from his classmates as well.

After teaching him at the eighth grade for some days, he said to me, “Teacher, I really do not understand English since elementary school. I do not understand any English words, so I cannot do the homework at all.” The teacher/researcher encouraged him to ask others for help if he could not understand how to do his homework. Still, he seldom handed in his homework, or he just copied others’ homework and then gave it to the teacher/researcher. In order to improve his English proficiency, the teacher tried to cooperate with his ex-homeroom teacher and forced him to memorize five words each day before he went to the basketball team after school since his eighth grade. York was the slowest student to memorize the words and be tested either by his homeroom teacher or the teacher/researcher every day compared with the other four weaker students in Class A. Soon, he tried to escape from memorizing vocabulary words by telling his homeroom teacher or the researcher he was assigned some jobs by Section Chief of Physical Education or just ran away immediately after class. After the teacher/researcher talked to Section Chief of physical Education about York, she said, “To York, low interests and poor grades in class were two major reasons why he was not willing to stay in class, so I let him help me do some jobs. But I told him that he should go back in class time.” He was always trying to escape from his study and rejected to learn no matter how hard the teacher/researcher and his ex-homeroom teacher tried. To York, he might feel happier staying in the basketball team which made him had a sense of achievement and

belonging there.

Process through preparing for the presentation

As the teacher/researcher described York's learning style, he seldom showed up in class; he was busy and focused more on his basketball team. In addition, he was not interested in English which was one of the main reasons why he never did any presentations in class. Also, the conflicts with other classmates made him stay away from presentations and class. York was arrogant and conceited in his usual behavior. He spoke loudly in class and often annoyed some classmates and teachers; also, his statements made others feel uncomfortable. He often judged others without considering their feelings. Though he had such a character which was annoying to other classmates, he also had some friends who used to stand by him until some fights at the eighth grade which made most of his classmates not want to stand on his side. Among these students, his teammates happened to be some of those who disliked him the most. York did not attend the first class in the ninth grade when the teacher/researcher asked the students to form into groups. York was the last one who had not been chosen by any group leaders. At last Edward picked him because his group needed one more group member. When York knew that he was in the group which consisted of two classmates he disliked, he asked the teacher/researcher to change a group for him. The teacher/researcher agreed to make some arrangements. Meanwhile, York never showed up again and his teammates never expected him to be present. The conflicts between him and his teammates and his lack of interests in English were barriers to his participation.

Attitude toward the presentation and IWB instruction

As the description of York's being absent from all presentations, he did not

attend or prepare any of them. The teacher/researcher could not have his opinions from the interview because he was absent all the time. He actually did not experience the IWB instruction much and have no interaction with his team. So the IWB instruction did not have any effects on York, either to make him come back to the class and continue his learning.

Yvonne

Learning style

Yvonne's English proficiency was not good; she did not understand most of the sentence structures and grammar the researcher taught. However, she could remember some words and understand their meanings. Yvonne was usually late for or absent from class, so the time she attended English classes became fewer and fewer in the ninth grade. According to her homeroom teacher, when he called Yvonne's parents and asked them to push her harder on her study, her parents just wanted her to be happy and did not want to push her hard even though they knew she was usually late or absent. Her homeroom teacher tried very hard to encourage her to study harder on her study but nothing seemed to work.

In English class, Yvonne was absent-minded easily because she did not understand English much. Whenever the teacher/researcher asked the students to underline some key sentences in the book, Yvonne would be one of the students who the teacher saw if she did what she was told to do. During the class, the teacher drew lots for some students to write the answers of the exercises on the board. Whenever Yvonne was called upon, she took other student's book to copy the answer from because she did not do anything of the exercises in class.

When it was time to hand in the homework, Yvonne was always late or did not

do it at all. From her workbook, the researcher found that she copied other students' answers because most of her answers and errors were exactly the same as other student's.

Process through preparing for the presentation

Yvonne's major job in the presentations was to share some parts of the introduction with Serena. The group leader, Edward, always undertook most of the work for every presentation. Also, she was often absent from class, and her English proficiency was too low to prepare any of the information. Hence, Yvonne could just passively receive whatever tasks Edward assigned her to do.

In most presentations, Yvonne was always accompanied with Serena, and they shared the oral presentation together. Yvonne prepared a note with her when doing the presentation, and whenever she could not pronounce the word, Serena helped her immediately. Sometimes, Yvonne and Serena shared the introduction part as the opening, and Edward did the rest. In short, the process Yvonne prepared for the presentations was mostly waiting for Edward's directions and did the introduction with Serena. Since Serena's English proficiency was better, she could help Yvonne pronounce the words that she did not know.

Attitude toward the presentation and IWB instruction

Yvonne said she felt regret for her wrong pronunciations at the review task when the teacher/researcher asked about her opinions. Besides, in her feedback sheet, she wrote, "If I could have been responsible for more work, I am sure I could do better than what I had done." And she thought the job arrangement for the presentations was unfair in her team. It surprised the researcher that Yvonne had such a positive attitude on learner-centered instruction and wanted to be responsible for more jobs. From her

learning attitude in English, Yvonne had always been a passive learner, and she tried to escape from any additional tasks. From Yvonne's opinion, she showed that though she had been a passive learner, she had positive attitude toward the presentation. The preparation of the presentation tasks gave her a sense of achievement and made her want to have more responsibilities of it.

As to the teacher/researcher's IWB instruction, Yvonne had good impression about it as well. She thought the example sentence of each new word and the grammar concept which embedded in the IWB were easier for her to understand. However, she thought the blackboard was better than the IWB, she said, "Because the blackboard is bigger." On the IWB, the answers to the exercises or the workbook have to be erased quickly because of time limitation. The IWB cannot provide enough space for the teacher to show more answers; while the blackboard provide more space for the teacher to display necessary information for the class. In short, Yvonne held positive attitude toward the IWB except the size limitation.

Serena

Learning style

Serena had intermediate level English proficiency compared with her other classmates; however, her learning attitude was passive. According to her homeroom teacher, Serena had been to the English cram school since elementary school. During the IWB instructional plan, the researcher noticed that Serena usually hid behind Yvonne who sat in front of her, and did not focus on teacher's instruction. From her homeroom teacher, she was also not so interested in her study. It was her parents forced her to go to the cram school; otherwise her English proficiency level would be worse. The researcher found that she often looked into the mirror during the class,

which she put it in her pencil box. She was also late for handing in her homework.

Though Serena did the exercises correctly most of the time in class, her attitude was always not active in her study. Like Yvonne, the researcher found that Serena was often absent-minded, and the teacher/researcher had to see if she did what she was told to do. Serena's learning attitude and style was similar to her friend, Yvonne. The biggest difference between Serena and Yvonne was that Serena had better English proficiency, quiet and seldom expressed her opinions in class.

Process through preparing for the presentation

In every presentation, Serena shared the presentation work with Yvonne whether to do the introduction as the opening or acted the scene out. The process Serena prepared for the presentations was to wait until Edward assigned the job, and then she shared half parts of the work with Yvonne. Serena and Yvonne just passively received the job from their leader, Edward and then wrote down what they had to say on a note for the presentation. When doing the presentations, Serena said more words and acted more lively than Yvonne due to the fact that Serena had better level of English proficiency. Compared with Yvonne, Serena had better performances in the presentation for the reason that she did not need to look at the note often at the presentation and helped Yvonne when she needed.

Attitude toward the presentation and IWB instruction

At the review, Serena did not express many of her opinions. She said nothing or did not have any opinions when the researcher asked her questions. From her feedback sheet, she wrote about the most impressive part of the IWB plan, "I learned to do the presentation in front of all the classmates." Also, like Yvonne, she wished to have responsibilities for the presentation and participated more. From her feedback to

the presentations showing that Serena accepted the new instructional plan that they were in charge of the class to do the review for her classmates even though she was passive in her learning. When asking about her opinions of the IWB instruction, she only said, “The interaction between the students and the IWB was interesting and it made English class not so boring.” From her feedback, we can know that Serena had good impression about the IWB instruction.

Summary of Group B

At the interview session, the researcher gave each member a feedback sheet and had them write down their thoughts in case they were too shy or nervous to express their opinions to the researcher. Both Yvonne and Serena stated, “I wished the job assignment could be more equal.” to the question: Which part do you want to improve most in this presentation? Furthermore, they also expressed the same opinion as, “I wanted to do more [work].” to the question: If you could do the presentation again, what would you want to do? The group leader, Edward also expressed the same opinion in the same question as to improve the job assignment in the review task. Their statement indicated that Edward controlled everything and prepared the task mostly by himself and then assigned least parts for Yvonne and Serena to share. Yvonne and Serena wanted to take more responsibilities than just passively assigned some parts by Edward. Edward also wanted to do less work for the presentations. The problem of this group was that Edward did not share more work with his group members, this made Yvonne and Serena thought they were not respected. Yvonne also wrote on her feedback sheet, “We all helped one another, though sometimes the job assignment was not fair, we did not mind [about that].” Instead of being passively received the job Edward gave, Yvonne and Serena desired to do more about

presentations and had their responsibilities. What this group lacked was the communication of job assignment for the presentation between the group leader and the members.

The researcher expected that with the experience of attending many conferences, Edward would lead the group better and had a cooperative learning with his teammates. However, he controlled everything for the tasks and did not listen to his group members' ideas. The two girl members complained about the situation on the feedback showed that they were eager to take more responsibilities for the presentations. Though the members in Group B did not actually cooperate together to achieve the presentation, they performed a better review task because they saw the previous six ones and gained more experience from them. Besides the cooperation problem, the members in Group B thought that the IWB was beneficial for their learning. Even though, the IWB instruction was more interesting and attractive to the students compared with the blackboard, one of the group members, York, did not benefit from it at all for that he did not understand English or even rejected to have another chance to learn it with the new instruction tool.

Compared with other groups, Group B made better and clearer layout for the other students to understand. They used the PowerPoint file to do their presentation tasks as well. However, Edward designed the fancy background and also with some animation for the audience. The way Group B used the IWB was only touch the screen in order to change the layout to the next page without using other functions.

Class B Group C

Overview of Group C

Group C and D were chosen from Class B which consisted of more low English

achievers than other classes in the same grade, and the students were more active in class. Likewise, students easily engaged into their talking in class. Group C was the boy leader, Gary, who did not pay full attention on his study all the time and easily lost his attention in class. He led one boy member, Dave, who had intermediate proficiency but was not interested in his learning; two girl members, Molly and Penny, who usually cooperated with each other to work for the presentations. Group C represents the students who had weak learning motivations but had to be responsible for English presentation tasks. The group leader, Gary, did not take the responsibility seriously to lead the group well at first, that they did not accomplish the second presentation. The job assignment for the presentation was unequal as well. Gary took the major job to prepare the information while others did the oral introduction for the presentation tasks.

Presentation style of Group C

Group C started their review from introducing the vocabulary words. First, Dave read the words out loud once and then Molly immediately said the Chinese meanings. After reading two words, Dave asked the other classmates to repeat the words after him, nobody repeated, and Dave did not ask again for the repetition. Dave and Molly taught the words twice, and this procedure took them seven minutes. Next part was the grammar review. Molly and Penny reviewed the passive voice and displayed some example sentences as their teaching materials. Again, Molly said the Chinese parts and Penny read English sentences. The girls taught the sentence patterns first and then, Gary asked other students to repeat the sentences after Penny. This time, the classmates obeyed Gary's direction. Penny and Molly spent four minutes on the grammar pattern as the end of their review task.

Group C was the first group in Class B to do the review task. Although they made their own teaching materials for the review while other two groups used the supplementary materials in the IWB in the first cycle. Group C did not use any tools in the IWB for their presentation; instead, they used the IWB as a big display screen. Furthermore, the interaction between them and the classmates was only the repetition of sentences. They did not design drills or practices for the classmates to get more involvement in their presentation. It might be that they were the first group preparing for the review task; they did not know the importance of interacting with the audience. The group members only showed and taught their teaching materials as the review task. They imitated a little part of researcher's instruction without the interaction and notice the other students' response.

Group C

Gary

Learning style

Gary was a student who sometimes studied very hard and paid full attention in class, but sometime lost his concentration easily. In other words, his learning attitude was not stable. His homeroom teacher said, "Though Gary's parents pushed him hard on his study and afforded him to go to the cram school. He was in the puberty and the period of resistance; this made him not so obedient to his parents." Compared with Gary's classmates, he had upper level English proficiency, actively responded to the teacher/researcher's questions, and read the text out loud in class. Gary understood most grammar the teacher/researcher taught. If he did not understand the teacher/researcher's instruction, he asked questions immediately. He carefully examined his tests again when his classmates already fell asleep at their desks. He

also joined the extra advanced-level class on Saturday since he entered the ninth grade, and did the exercises from the reference book the extra class gave him. However, he sometimes forgot to do the homework and handed in it late. If he forgot to do the homework, he completed it and then gave it to the teacher before the end of the class. Even though Gary had better performance in English than most of his classmates, his learning attitude was unstable. Sometimes he worked very hard, but sometimes he was lack of energy in class.

Process through preparing for the presentation

Being a group leader, Gary's job was mainly to collect the information and type it into the computer file. Unlike most group leaders who took full responsibility from the beginning to the end of every task, Gary was only responsible for the preparation work, which was the data collection and the computer work, and then assigned his group members to share different parts for the oral presentations. He did not take full responsibility to see if his group members had full preparation for the presentation or other details he needed to take care of before the presentation. Some problems arose under his leadership.

The researcher asked each group to send their files before the presentation day from the first day she announced the plan. At the second presentation, Gary said to the teacher/researcher he sent the file, but the researcher did not receive it. The worse thing was that he did not have a copy file with him. For this reason, they did not do the presentation and the whole group had to stand up as a punishment until the end of the class. From this experience, Gary's teammates would make sure they sent the file and Gary asked one of his group members, Penny, to bring a flash disk in case the file did not send to the researcher. At the review task, he still typed the information into

the computer by himself and assigned his teammates to do the oral presentations.

When his group members did the presentation, some students found that there were some grammar errors and typos in the file. In the interview session, he confessed that he did not check the file again after typing because he thought it was perfect enough for the presentation. He only collected the data, did the computer work, assigned other members to do the oral presentation. He left his group members alone without checking their schedule management and the file his group presented to have some mistakes happened during the IWB plan.

Attitude toward the presentation and IWB instruction

Gary said, “I was very satisfied with my team’s performance at the review task.” because the other two groups did it by using the software that the textbook publisher provided. His group was the only one made their own teaching materials. Although he made the typo errors in his material, he was still pleased about it. However, for other tasks, he did not take it seriously enough. Like his learning attitude toward his study, his performances would be sometime good but sometimes not. In other words, from Gary’s performance of preparing presentations, the researcher found that Gary did not put all his enthusiasm into the tasks. Whenever there was a task, he quickly got the job done without double-checking if there were any problems happen in his file or his teammates. Gary did not put much care on his teammates when they were preparing for the presentation tasks.

As a leader, Gary expressed the most opinions than other members in the interview session. When the researcher asked their opinions about the IWB instructional plan, Gary held the positive attitude toward it, “I think it was interesting because you can interact with it. It was exciting and new. You can also touch it and do

exercises on it.” From Gary’s words, we could know he had good impression about the IWB. Gary was impressed by the touch sensitive function which he could interact with it, and this could not be done with the traditional blackboard.

Dave

Learning style

Dave’s had intermediate level English proficiency, but his learning attitude was not active. He has learned English since elementary school so that he had good English proficiency. Based on his homeroom teacher, when entering the junior high school, he started to complain about too much homework that he did not want to do it. Dave’s homeroom teacher called his parents and told them about this problem, his parents said they respected his opinion and they would not force him to study until he wanted to. Hence, when Dave was in his ninth grade, he did less well than he could than eighth grade. He usually went to school late and even started to be absent from half of the semester, i.e., November. When he attended in English class, he lost his concentration easily by talking to others or bent over on his desk. Moreover, the researcher sometimes checked students’ books to see if they wrote down the answers of the exercises. Dave was always one of the students who did not complete it. Thus, the researcher had to remind him to pay attention in class and do the exercises in the book.

As the previous description, Dave complained about too much homework to do after he was in the ninth grade. He usually did not do his homework or did not appear in class. Dave’s homeroom teacher often talked to the researcher about how pity she felt about him because she thought he could be a good student if his parents pushed him hard and he could think about his future. Still, Dave kept the same attitude to his

study since the ninth grade. The behaviors made his English grades lower than he could gain in the eighth grade.

Process through preparing for the presentation

Dave was not interested in his study since the ninth grade. Doing the presentation was only to support his friend, Gary. Because the group leader, Gary, did the whole preparation work for every presentation, Dave's jobs was mostly to briefly do an introduction of the presentations or use the IWB to change the display while his teammates were presenting. When Dave was responsible for the oral presentation, he passively received his job from the group leader to present it. Because he had intermediate proficiency in English, he did not have difficulty in recognizing the words Gary wrote to him. Yet, when he did the presentations, the researcher found that he was not so sure of what he was saying and sometimes he had to ask Gary the words on the transcription. Then Gary would help him immediately when he needed. When Group C did the presentation, Dave usually shared the least parts of the oral presentation. The researcher noticed that he did not focus on it from his asking for help from Gary; which means that compared with other teammates, he spent the least time doing the oral report and then stood aside to wait for the end of his group's presentation. From the researcher's observation of Dave's performance in each presentation, his job was only to prepare what he had to say. Some oral mistakes happened because he was not familiar with the information Gary provided him. He did not spend time on his school work let alone doing the reports. Dave did not involve himself in the tasks, he did the job for Gary.

Attitude toward the presentation and IWB instruction

In the interview session, Dave barely said much; the researcher had to actively

ask him questions. In spite of this, he still did not answer the teacher/researcher's questions or said that he had no opinions and comments. When the researcher asked him about his feelings of doing the presentation, he said, "so so." then he kept quiet till the end of the interview. To Dave, doing the tasks was like doing the homework which he was not willing to do. His participation in the review task and was never absent from other presentations were based on his friendship with Gary.

When asking about his opinions of the IWB instruction, he just said, "Nice". But when the researcher kept asking why he thought the IWB instruction was good, he did not say anything about it. Though the interaction with the IWB was a new and interesting experience for him, doing presentations was still an additional homework that he rejected to put efforts on. Moreover, he seldom appeared in class, so he had less time to interact with the IWB than his classmates. Hence, to Dave, the new IWB instructional plan might have no difference compared with the blackboard instruction since he had less interest in learning at the ninth grade.

Molly

Learning style

Molly was an aborigine student who was very optimistic in her personality. She had very low proficiency in English and so were her other school subjects. Despite that, she had an active attitude toward English. When the teacher/researcher started teaching Class A and B, she announced that she had an after-school tutoring program everyday which took thirty minutes to improve their English. If anyone was interested in it, she or he should have the parents' approval first and then asked the teacher/researcher and the homeroom teacher to join in the program. Molly was one of the students in Class B joining the program. She told the teacher/researcher,

“Teacher, I do not understand English and I want to improve it.” She joined the program in order to improve her English; however, she quit attending it in January, which was nearly the end of the first semester. The reason she quit the program was that she said she had something to be busy with. The reason she said was ambiguous and her homeroom teacher said that she might not have patience to learn. The other students did not know the reason why she quit joining the class, either. Though the teacher/researcher felt pity that Molly gave up learning English and told her about it, Molly never came back to the program.

Since Molly did not understand much English, this made her not be able to complete her homework. When it was time to do the homework, she tried to do the multiple choice section and then copied some written sentences from her classmates to finish it. Still, sometimes she submitted the homework late because she forgot to do it. When Molly was in English class, the researcher found it was hard for her to pay full attention and she could not answer the questions. She needed some other students’ help to answer the teacher’s questions or complete the exercise on the IWB. In brief, Molly’s learning style of English was trying to understand English in class in order to finish her homework. Although she was once determined to enhance her English ability by joining the after-school tutoring program, she did not join it till the end of the semester.

Process through preparing for the presentation

Because of Molly’s low English proficiency, she could not offer much help for her group. At the first presentation, Molly’s job was merely to use the IWB for her teammates to do the oral report. After the researcher told her to try to do some oral introduction, she did it in Chinese. Not until the last two presentations did she start

presenting in English. In the most important presentation, review task, she and Penny were responsible for the grammar review, Penny presented it in English while Molly translated it into Chinese. In most presentations, she worked with Penny and presented in Chinese when Penny presented it in English. Until the last two presentations, she tried to present in English. However, Molly usually performed in a very small and uncertain voice because she was not familiar with how the words should be read. Thus, Molly was mainly responsible for the oral presentation in Chinese. When she presented in English, she was lack of confidence to speak it and needed Penny's help.

Attitude toward the presentation and IWB instruction

Molly almost said nothing in the interview session. As the researcher asked her opinions about the presentations, she said, "I think I can learn more from the presentation." Then the researcher continued asking her why she thought she could learn more, she expressed, "When doing the review task, I also had to learn the words and the sentence patterns, this gave me more chances to learn." From Molly's reflections of doing the review task, it showed that she had positive attitude toward the presentation tasks. Though Molly only shared minor work as presented in Chinese or minimum English with Penny's help, she still put effort on the tasks to show she tried to involve in her team and participate in the project.

Molly did not state her opinions about the IWB instruction at the interview. Mostly, she stayed with her group members and listened to their opinions. The researcher had to ask her thoughts about the IWB instruction. She only said, "It was good." and then kept quiet to let other teammates express their thoughts. In class, she was sometimes called by the teacher/researcher to have interaction with the IWB by

doing some exercises; she was willing to do it. She did not reject to answer questions in class or interact with the IWB. Molly accepted the IWB instructional plan and attracted by its multi-functions.

Penny

Learning style

Penny was an energetic student and often expressed her ideas in class. In comparison of her personality, she was more passive to focus on her school work. She had basic level in English, but she did not understand most grammar patterns the teacher/researcher taught. She joined the after-school tutoring program in order to have progress in her English ability. She asked the teacher questions if she did not understand the teacher's instruction whether in class or in the program. However, her learning attitude was not stable. According to her homeroom teacher, Penny got tired easily on her study. She sometimes worked hard, but was sometimes tired of it and then gave up studying. Also, she often missed to hand in her homework because she forgot to do it. In class, Penny was absent-minded easily by looking outside the window or chatting with her classmates who sat around her. Moreover, when she was not focusing in class, she even looked at the mirror which she put it on the desk, and stared at it for a long time; sometimes she even read the novel stealthily.

Student like Penny always had the teacher/researcher's attention. If Penny could study harder, she would have better grades in English. Penny's grades did not improve after her attending the after-school program. Though the teacher/researcher encouraged her to put effort on her study, she kept her own learning attitude.

Process through preparing for the presentation

When preparing for the presentation, Penny was always companied with Molly

to do the oral presentation together. Penny had better English proficiency than Molly, so she taught Molly when Molly was in need. Thus, one of the most important jobs for Penny to prepare for the presentation was to share the job with Molly and teach her how to read the words correctly at the presentation tasks. Mostly, Penny was responsible for the English presentation while her partner, Molly, translated it into Chinese. She and Molly cooperated together to accomplish their oral presentation. Penny worked together with Molly and helped her during the whole presentation tasks. Penny prepared every presentation by receiving the material from Gary and then divided it into two parts for her and Molly to do. Sometimes, she collected the needed information for Gary, but she was mainly responsible for the oral introduction.

Attitude toward the presentation and IWB instruction

Penny's attitude toward the review task was that she thought it benefited her by learning how to do the presentation. Nevertheless, she said, "I thought it was better for the teacher to do the review for students because we might make mistakes." She realized how essential the review task was and she thought it would be better for someone more professional to do. It was such an important responsibility for students to do the instruction. Though she could learn how to do the presentation and had some experiences she never had before, she still doubted the effects of learner-centered presentation tasks for the reason that students did the review instruction for other classmates.

Penny did not express many of her opinions the same as Molly did at the interview. She only said few words by answering her thought about the IWB instruction, "I thought it was good." The researcher kept asking her the reason why she thought the IWB instruction was good, she could not say anything. At the

interview, Gary was the one who did the main talk; and Penny started looking outside the room until Gary answered, “Because it had many interesting functions for me to interacted with. “, she agreed with his opinion. Like most students, Penny was also impressed by the interesting functions the IWB provided as another way of learning English. In brief, Penny had good impressions about the IWB instructional plan though she doubted the learner-centered teaching for the presentation tasks.

Summary of Group C

The group leader, Gary was an upper level student but he sometimes lost energy to learn; which means his learning attitude was not stable. The way he led his group was different from other leaders. Most leaders did most preparation work for the group and control every process of their group members did; while Gary did not emphasize whether his group members completed their jobs or not. Another boy member, Dave was not interested in his study since he entered the ninth grade. According to his statements to his parents and homeroom teacher, he was tired of doing too much homework and learning. Based on his learning attitude, he did not put much effort on the presentation tasks. When the teacher/researcher entered the classroom, Dave was still preparing for his oral presentation. Also, he was reading the words and asking Gary during the time other groups were presenting, so he read the words incorrectly sometimes. Instead of being absent in class, Dave showed up on the presentation day because of his friendship with Gary. This relationship between Dave and Gary made Dave participate the project instead of being absent from other classes. Two girl members, Molly and Penny, always worked together to do the presentations. Penny’s English proficiency was better than Molly, so Penny presented the English part when Molly was responsible for the Chinese part. When presenting in English,

Penny helped Molly when she was in need of Penny's help. Therefore, Penny was always accompanied with Molly to do the presentations.

Group C represents that when the 9th graders were busy with their studies, how they managed the additional presentation tasks and how junior high school students thought cooperation was. The leader, Gary thought his main job was to type the information into the computer and then assigned his group members to finish the rest jobs, which was the oral presentation. After Gary assigned the job to his group members, he did not care about his teammates' working process for the presentations. The other team members, Dave, Molly and Penny were each responsible for their own jobs but all the group members did not meet together to check if they had full preparation or not. In students' opinion, their so called cooperation was to assign jobs for each member to be responsible for and then combined their work together on the presentation day. Some problems arose under this condition such as the failure of the second presentation task. The students' cooperation style presented their lack of experience of doing the student-centered presentation and did not know how to cooperate with one another to achieve the mutual goal. However, Group C provided a chance for Dave to stay in class for the presentation. Compared to his usual absent from class, Dave was never absent from the presentation in order to help Gary with the tasks. Also, the learner-centered presentations provided chances for Molly and Penny to learn and promote them in English again. These are the effectiveness the IWB brought to Group C.

Group C mostly used WORD to present their materials as presentation tasks. They would list both English information and Chinese explanations on it. They often had clean background and beautiful pictures on their format. Also, they only used the

IWB as a screen to show their materials, the only way they utilized the IWB was to touch it to change the page of their files.

Group D

Overview of Group D

Tracy, the group leader was a teaching assistant in Class B. Her group members included Grace, who studied earnestly, and Howard and Chad, who were both very low achievers. Group D represents two hard-working learners tried to work with a really low achiever and an Attention Deficit Disorder (ADD) student to accomplish the tasks. Those two hard-working learners spent most time teaching and forcing the two low achievers learn to do presentations in English, especially the ADD student, Howard. Fortunately, Howard and Chad were willing to cooperate with the leader and accomplished the tasks successfully at the last review task though they did nothing at the beginning. Gradually, they were responsible for the least oral introduction for the presentations. The major responsibility to prepare for the presentation tasks was still Tracy and Grace's job.

Presentation style of Group D

After Tracy briefly introduced the topic of the unit her group was responsible for, Group D started their review task. The first procedure of their review presentation was that Chad and Howard took turns to read the vocabulary words and led other students to repeat after them. They spent three minutes reviewing the words. The second presenter was Grace who reviewed the rules of indirect questions in Chinese and then read the example sentences for the other students to repeat. This took them another three minutes. After reviewing the sentence pattern, Tracy showed three multiple choices, five fill-in-blanks and five sentence arrangement questions for the classmates

to answer as exercises. It took them seven minutes to finish the exercises as the end of the review task.

There were some interesting points need to be noticed in Group D's review task. First one was that though Chad led other students to repeat the words with him, he often pronounced the words incorrectly. Although some students made fun of his mistakes, most students still repeat the words with the correct pronunciations. This showed that students were willing to cooperate with the group members even though they knew the presenter made some mistakes. Second, when it was Howard's turn to read the words, he read them in very low voice that Grace had to help him use the microphone to make his voice louder for everyone to hear. Also, when the students read the words after Howard at the beginning, they read it in low voice as well. Grace helped Howard tell the students to read louder, which was like the teacher/researcher usually asked the students to do in class. Grace assisted Howard in managing and presenting his oral presentation during the whole task. The third one was that before the Q&A, Tracy told everyone that there would be candies as rewards if the students volunteered to answer questions. Tracy tried to encourage her classmates to answer the questions more actively. This made their presentation more fluently and successfully compared to other groups in the review task.

Group D was the last group doing the review task. Like Group B in Class A, Group D had watched many groups doing the review tasks and knew how to perform it in a better way. Tracy prepared most questions for the students to do the practice compared with other groups. Grace offered much help for Howard while he was doing the oral presentation. Chad also tried very hard to read the vocabulary words although he made many pronunciation errors. From their performance, the researcher found

that Tracy and Grace played important roles in Group D to help two boy members complete the review task.

Tracy

Learning style

Tracy was a hard-working student. She was very active in learning English because she wanted to have better grades. She had a strong sense of responsibility to do everything well. Therefore her homeroom teacher asked her to be the teacher/researcher's teaching assistant. Being responsible for everything, Tracy treated her schoolwork seriously. Whenever she had some questions in doing her homework, she asked her classmates who had better proficiency than she did. She carefully wrote her homework to hand it to the teacher/researcher, after that she was busy collecting other students' homework for the teacher.

She was determined to improve her English ability when she entered the eighth grade. She said to the teacher/researcher, "Teacher, I wanted to learn English well." Whenever there was a vocabulary quiz, she held her English textbook and kept memorizing them even when she came to the teacher/researcher's office to carry the laptop to the classroom. After the tests, Tracy asked questions which she did wrong and wrote down the correct answers on her test immediately. She said to the teacher/researcher that she did not want to make the same error on the test again. During the whole IWB plan, she had a very active and energetic attitude toward learning English. She believed the only way to improve her English was to study hard and she continued her hard-working attitude in her learning.

Process through preparing for the presentation

Since Tracy was the group leader, she did the most jobs like other leaders.

Luckily, Grace shared the jobs with her to achieve every presentation. Her major job was to collect the information, and then typed it into the computer. She also had to teach Howard and Chad to do the presentation works. However, being a group leader was not easy for her. Her English proficiency was not good enough for her to understand some information she collected and the materials she wanted to express. Like Tina in Group A, Tracy asked the teacher/researcher's advice in advance and did the correction before the presentation day. She was motivated on doing the project and carefully prepared for every presentation. Besides that, Tracy had another difficult job which was to make Howard and Chad participate the presentations. The two members were less motivated than she and Grace, they did not want to do the presentations. Tracy had weaker leadership to let them cooperate with her at the beginning. She then cooperated with Grace and had more power to make them participate in the presentations. Therefore, Tracy was not only responsible for the major job as collecting the needed information, typing it into the computer, but also assigned some works for Chad and Howard to complete and to supervise them before the presentation day.

Attitude toward the presentation and IWB instruction

Tracy said, "I had a sense of achievement because they all responded to my questions." in the interview session after the review task. To Tracy, doing every presentation was an accomplishment. The teacher/researcher asked her opinions about making students do the presentation tasks when she came to the office to ask for help. She answered, "Although I thought it was difficult, it was fun." Though it was a difficult work for her to do, once she achieved it, she had a sense of achievement by completing a work. She was very happy to have such experience to do the

presentations on her own.

Like most students' impression about IWB, Tracy also thought the IWB instructional plan was interesting because students could touch and interact with it. She expressed the pros and cons of using IWB in class.

I thought using IWB seemed trendy. We could keep up with times. It was more convenient for students to see. However, there were too many wires and it would become lag sometimes. Also, it should be bigger for students sitting in the back of the classroom to see it more clearly.

(Interview, January 18, 2011)

Though she mentioned some disadvantages of the IWB, she still loved the IWB better than the blackboard. When the researcher asked her opinions about whether to continue using IWB for instruction in the next semester, she approved it at once. Thus, Tracy had good impressions about the IWB instructional plan and wished to keep it at the second semester of the ninth grade.

Chad

Learning style

Chad did not learn English well since he studied in elementary school. He said to the researcher, "Teacher, I did not understand English." Then the researcher asked him that all students have to study English from elementary school, why he did not understand. He responded, "I did not learn English well at the elementary school. I did not understand phonics, and I did not understand KK phonetic symbols, either." Because of his failure experience of learning English from elementary school, he had really low English ability. Since he did not understand English, he did not have interests to learn. The teacher/researcher forced him to memorize five words everyday

at the eighth grade like York in Group B. He improved a lot by showing that he could fill the vocabulary words in blanks correctly on tests. However, he did not continue memorizing vocabulary words since the teacher/researcher did not force him at the ninth grade. Since then, he did less well than he could in the eighth grade.

For the reason that he did not understand English at all, he could only do the multiple choice section on the homework or even missed handing in his homework. However, he made up for his homework immediately after the teacher/researcher corrected all the answers in class. Because of Chad's failure experience in learning English since elementary school, he did not try to learn it again. He gave up his study including English from junior high school. Though sometimes he was bored easily and began chatting with others around him, he behaved himself well in English class most of the time.

Process through preparing for the presentation

Chad had low proficiency and no interests in English, he did not do the job for the presentation autonomously; instead, he did it passively. Chad was only responsible to use the IWB for his group at the first presentation, showing the picture at the second one and acting out the scene without saying any words at the third one. He did these jobs without speaking any English words. Chad then started doing oral introduction at the fifth presentation but he did it in Chinese. After that, he tried to present in English slowly. He gradually cooperated with his group leader, Tracy, by sharing some oral introduction of the presentations.

Chad did not understand English at all, so he had to depend on Tracy and Grace to teach him. First, he received his job from Tracy, and then the two girl members taught him how to read the words. Like other low achievers, Chad took a note with

him in case he forgot how to say the words. Tracy and Grace forced Chad to remember the words and then asked him to read to them in advance before the tasks. When Chad did the presentation on stage, he asked Tracy or Grace for help if he had trouble doing the oral presentation. The process he prepared for the presentation was to wait for Tracy's assignment, practiced reporting his part and then performed to Tracy and Grace before the presentation day.

Attitude toward the presentation and IWB instruction

Chad thought doing the presentation was fun and he thought he could perform better. From his interview, he judged his performance, "I thought I could pronounce the vocabulary words better." From his feedback sheet, he also thought the reason he pronounced incorrectly was because he did not practice them more. Moreover, he wrote on the sheet, "Everyone worked together to complete a good report." which impressed him at the review task. Though he had no interests in English, he raised some interests and had some achievements throughout the process to prepare for the presentation tasks. This made him feel successful by achieving the plan.

Chad had positive attitude toward the IWB instruction. Like Tim in Group B, Chad could not answer the teacher/researcher's questions in class, but he was willing to interact with the IWB to do some exercises. Chad also agreed with Tracy's statement about the advantages of the IWB, which was more digital and up to date. He liked the IWB because he could see more supplementary materials like pictures and videos on it.

I liked the IWB better than the blackboard because we could see pizza pictures [*which the teacher/researcher showed them as supplementary materials*], and videos [*which named "Table Manners" the*

teacher/researcher showed them as supplementary materials as well].

(Interview, January 18, 2011)

For the reason that IWB brought more interesting materials to attract the students' attention, and Chad had more chances to answer the questions correctly by moving the answers to the designate blanks as exercises which were embedded in the IWB. This gave Chad a sense of achievement, and it was probably the main reason why Chad liked IWB better than the blackboard.

Howard

Learning style

Howard was a special student who had Attention Deficit Disorder (ADD). He had not been diagnosed until the seventh grade in junior high school. Because of this disease, he had poor attention on everything. According to Low (2010, ¶ 4), "These individuals may have trouble paying attention, finishing tasks, or following directions. They may also easily become distracted; appear forgetful, careless and disorganized; and frequently lose things". These symptoms made him have poor performance on school work and relationships with his classmates. However, Howard's parents did not take him for medical treatment which made the situation even worse at the ninth grade. All the school subjects were more difficult than before, and Howard could not learn any of them and finish the homework by himself.

Howard could not finish his homework at all and could not pay attention in class. So, he never handed in his homework and he did not understand English at all. When he was in class, he usually finished his homework by copying one of his classmates' homework or stared at the book and did nothing. The teacher/researcher sometimes encouraged Howard to interact with the IWB and do some exercises on it, he tried to

touch it and had some fun with it. To Howard, learning was a difficult thing that he could not do since he was an ADD student.

Process through preparing for the presentation

As Howard's ADD symptoms, he could not share much work with his teammates for the presentations. Howard did nothing at the first, second and fourth presentation tasks. He acted out a scene without saying a word as his participation in the third presentation task. Gradually, he took the job as doing the oral presentation by saying a few words. Tracy and Grace taught him how to say the words which he was responsible for. And they also helped him when he was in need during the presentations. Forced by Tracy and Grace, and with the company of Chad, Howard began involved himself in the IWB plan. Like Tim in Group A, Howard also made a great progress at the review task. At first, Howard was unable and not willing to do the work for the tasks until his teammate, Chad, started to involve in. Also, with Tracy and Grace's help and encouragement, Howard tried to join the presentation more by gradually spoke more English in the presentation tasks. Though it was difficult for him to be concentrate for a period of time to complete a work let alone a subject which he was not good at, he achieved it by Tracy and Grace's help.

Attitude toward the presentation and IWB instruction

Howard only said two sentences at the interview and the researcher had to wait for a long time for his response. He responded to the question which was his feeling about the review task as, "Students raised their hands to answer questions.", which made him feel a sense achievement. He wrote on the feedback sheet about which part of the review task impressed him most as, "The content was interesting, which could let students volunteered to speak [answer questions]." And he also answered to the

question: If you could do it again, you would...? as following, “To collate the whole vocabulary, sentences and grammar [of the unit] again.” Although he did not express himself clearly at the interview, he had a sense of accomplishment from the task. From his opinions on the feedback, being a member of the group, he was happy and proud to see his classmates participated enthusiastically in an activity they designed. Hence, he had positive attitude toward the presentation tasks.

When the researcher asked Howard about his impressions of the IWB instructional plan, he only said, “The basketball game was interesting.” The reason he said so was because the teacher/ researcher once used the software in the IWB to design a word-spelling game. Students had to spell the words the IWB showed them by choosing letters listed on it. Then the letters they chose turned into basketballs. Next, they had to throw each ball into the basket. If the student chose the wrong letter to spell the word, the basketball would miss the shot. The teacher/researcher once asked Howard to play the game, and he had fun playing it. Howard responded to his impressions of the IWB instruction could be seen as evidence that he had interests in the IWB instruction. Even though Howard was an ADD student, he had interests by learning through the IWB and focused on the attractive functions the IWB provided for instruction.

Grace

Learning style

Grace was a very enthusiastic and passionate student. Her teachers of all subjects were impressive about her attitude toward the study. She took her schoolwork very seriously and enthusiastically. When Grace was in class, the teacher/researcher noticed that her eyes were always focused on the teacher and took notes immediately

after the teacher/researcher wrote some supplementary information on the board. She had intermediate level in English and understood some English grammar patterns; however she was eager to study harder to improve her grades. Grace treated her homework seriously as well. She wrote her homework carefully and corrected her mistakes at once after the teacher/researcher corrected her answers. She never handed in her homework late or missed it. Grace was concentrated in class as well, and she asked questions which she did not understand soon after the break time. Her attitude toward her study was very positive and active.

Grace also joined the after-school tutoring program because she wanted to have better performance in English. She was never absent from class even in the after-school tutoring program. Besides the program, she joined the advanced-level class on Saturdays as well. With so many classes she attended, she had more assignments and homework to do. However, she completed each and never missed one of them. In short, Grace was an autonomous, practical and hard-working learner.

Process through preparing for the presentation

Grace always shared the major jobs with Tracy. They helped each other to collect the information, and solved the problems they had during the preparation for the tasks together. She was mainly responsible for the oral presentation. Grace treated the presentations as another assignment for her, so she prepared them seriously as usual. When she had some difficulties preparing for the presentation, she and Tracy came together to the office and asked for the teacher/researcher's help. Besides sharing the jobs with Tracy, Grace also helped to train Chad and Howard to be responsible for one part of the oral presentation. Grace and Tracy assigned some parts to Chad and Howard and then kept reading the words for two boy members to

memorize the pronunciations. After repeating many times, Grace and Tracy asked Chad and Howard to read their parts to check if they pronounced the words correctly. Grace was like a vice-leader of Group D and put much effort to prepare for the presentations.

Attitude toward the presentation and IWB instruction

Grace had great impressions of the presentation tasks. She did the most talk in the interview session. She said, “I felt that our group performed better than other two [at the review task] because students were more active than previous review tasks.” Moreover, she stated her feelings of doing the presentation tasks, “I thought that doing group presentation tasks made us more responsible to achieve them.” She even wrote on the feedback sheet, “I hoped to join the presentations again next semester.” From her feedback, the researcher found Grace enjoyed presentation tasks because she felt that they gave her a sense of achievement.

Besides agreeing with Tracy and Chad’s viewpoints about the IWB, which are interesting, manipulating by single touch, and show pictures and videos as supplementary materials, Grace also offered her opinions about the pros and cons of the IWB instruction.

I thought using the IWB was more digitizing [than the blackboard]. Some of my classmates’ cram schools using IWB for instruction as well. And it was more eco-friendly, because the teacher used it without chalks and I did not have to breath in chalk dust. However, some students thought they did not have to take out their books because all the contents were showed on the IWB. Some students might fall sleep because the lights were

turned off and the window curtains were drawn closed. (Interview, January 18, 2011)

Grace loved to be taught by the IWB. She was very excited about the functions and tool bars embedded in IWB, and the effects it brought to make the class more entertaining and effective in learning English.

Summary of Group D

Group D treated each presentation task very seriously because of Tracy and Grace. They were both hard-working students and engaged themselves in preparing for the presentations. Compared with them, two boy members, Chad and Howard, did not put much effort on presentations at first. Chad and Howard were both low achievers for different reasons. Chad became a low achiever because he did not learn well since he did not understand English from elementary school and then he gave up trying when entering junior high school. Howard was an ADD student and was inattentive to everything, so that he could not focus during the teacher/researcher's instruction without the medical treatment. Besides preparing for the presentation, Tracy and Grace had to make Chad and Howard participate in the plan. Tracy and Grace worked together to prepare for the tasks and teach Chad and Howard how to read their oral presentation until they were ready. Slowly, Chad and Howard started to cooperate with Tracy and Grace, and completed some presentations together.

This group provides an example that two autonomous learners had great effects on two low achievers, which was the effect of cooperative learning. Because of Tracy and Grace's hard-working attitudes toward presentations, they affected Chad and Howard to involve themselves in the presentation tasks as well. Chad and Howard had positive attitudes from doing the tasks because they gained responses

from their classmates at the review task. They felt successful in doing the review task compared with their failure learning experiences before. The IWB instructional plan and learner-centered instruction gave Chad and Howard achievement in the subject that they did not succeed before. These are the effectiveness the teacher/researcher wished to see in this plan.

Like Group C, Group D also used WORD to do their presentation tasks. They put a lot of description on their format to show that did the research carefully and collected much information for the tasks. However, they did not use the functions the IWB provided; instead, they only used the function to change the page of the material like other groups.

The comparison of four groups

Groups A to D represented different kinds of atmosphere and teamwork style of junior high students worked for a group project. Group A represented the job fell on the leader who was an autonomous learner. The leader, Tina, took full responsibility to prepare for the tasks because two of her group members, Tim and Jean, were not willing to offer help to the presentations. Only one teammate, Zoe cooperated with Tina and shared little job she could do for the presentations. The boy member, Tim involved himself in the review task and had great improvement; that was a huge change compared with his quietness and rejected to answer any questions in class. The member who did the least job in Group A was Jean. She did not participate much in all presentations during the whole plan and did not do much work due to her usual absent or ask for a sick leave from school. The working type of Group A was the group leader took care of most work and tried to ask her group members to work with

her. Yet, not all members followed her directions and worked with her. Tina was the main person to be responsible for all preparation works for all tasks.

Group B had more members who were willing to share the work; however, the group leader Edward tended to do all work by himself. Another boy member, York seldom appeared in class and never showed up at the presentations; he had no interests in his study and had serious conflicts with some classmates. Two girl members, Yvonne and Serena passively accept Edward's assignment to do the oral presentations. They felt the job assignment was not fair and hoped to have more power to manage doing the presentations. Edward controlled too much about the preparation work, and make Yvonne and Serena feel that Edward did not respect them. Though Yvonne and Serena said that they would not dispute about that on the feedback sheet, they still wanted to have more power to do the project.

Group C was another type of leader leading the group. Gary was responsible only for data collection and made his group members share the oral parts he prepared for the presentations. Other members, Dave, Molly and Penny then separately prepared the oral introduction for the tasks. During the whole project, those members did not cooperate well to make sure they had full preparation for each task. They always combined their oral parts on the presentation day before the English class. Dave counted on himself to understand the material he was assigned, and then he asked Gary for help when he was in need during the presentation. Meanwhile, Molly and Penny worked together to share the work because Molly had to depend on Penny. This group represented junior high students did the project by themselves separately and did not work together to complete a project together. They were just responsible for their own job and then combined the work together on the due date.

Group D was the type that the researcher as a teacher wanted to see from the project. The group leader, Tracy and Grace are both autonomous and active learners. They worked together to have full preparation for the presentation all the time. They treated the presentation as challenges for them to achieve. Moreover, they affected two low achievers to cooperate with them and accomplished the presentation tasks together. Even though one of the group members, Howard, was an ADD student, he had good performance on the review task because of Tracy and Grace's teaching. It was a difficult job for Howard to focus in class because of his symptoms of ADD; however, Grace and Tracy kept encouraging and teaching him that made him succeed in doing his part of presentation for the task. Another boy member, Chad was affected by his unsuccessful learning experience in English, which made him give up learning since elementary school. But, he was also affected by Grace and Tracy and had good performance at the review task like Howard. Group D was a successful example to show that doing learner-centered teaching not only made students learn more from the process to prepare for tasks but also benefitted low achievers to have sense of achievement because they engaged themselves to accomplish this project and gain successful experience from it.

The four chosen groups had different type of teamwork to prepare for the presentation tasks. The cooperative styles of each group when implementing the IWB plan will be discussed more deeply in the next chapter. The following was the summary of four focused groups of doing the presentation tasks (See Table 4.2).

Table 4.2. *The comparisons of four chosen groups*

	Teamwork through the process of preparing the project	Effects after the project
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<p>Group A</p>	<p>The main job fell on the group leader while others did not participate much for it.</p> <ol style="list-style-type: none"> 1. The group leader, Tina, took the major job to prepare for the presentation because other members did not give her much help. 2. Tim did not join the project much until the review task. 3. Zoe worked with Tina and offered what she could do. 4. Jean appeared the least during the IWB plan and did the least job. 	<p>Tina thought the presentation tasks and the IWB instruction made her learn more. Tim also made a progress at the review task compared with his usual behavior in class. And other two members did not seem to benefit from the plan.</p>
<p>Group B</p>	<p>The group leader took the whole responsibility for the presentations.</p> <ol style="list-style-type: none"> 1. Edward prepared for all presentations and then assigned some parts to his group members without listening to their opinions. 2. York never did the 	<p>All group members had positive attitudes toward the project and the new IWB instruction except York. The two girl members even wanted to have more responsibilities for the presentations even though they did not have good academic performance and active attitude</p>

	<p>presentations because he had disagreement and conflicts with two group members.</p> <p>3. Yvonne passively accepted the work and worked with Serena because she needed help.</p> <p>4. Serena also accepted the work from Edward and worked with Yvonne to help her.</p>	toward their studies in class.
Group C	<p>The group leader was only responsible for the data collection and then left the oral parts for all his members to share.</p> <p>1. Gary only did the data collection but not the oral presentation, and he did not take care of his members during the preparation for the tasks.</p> <p>2. Dave was not interested in homework and tasks, so he helped to share some work because of Gary.</p> <p>3. Molly received the work from</p>	<p>Though Penny questioned about the effects of having students do the review task for the monthly exams, other members had affirmative opinions about the project, especially the IWB instruction.</p>

	<p>Gary and shared her work together with Penny.</p> <p>4. Penny received her parts from Gary as well and then helped Penny to do the oral presentation together.</p>	
Group D	<p>The group leader and another hard-working learner worked with each other to prepare for the project. And then they taught two low achievers to complete the tasks together.</p> <ol style="list-style-type: none"> 1. Tracy was pleased to accept the task as challenges and carefully prepared for it. 2. Chad did not do the job for presentations at first, and then was gradually willing to share some work with his teammates. 3. Howard could not do some work because of his symptoms of ADD. He also joined the project little by little with 	<p>All group members were very happy to join the project and had achievement through the project. They treated IWB instruction as more interesting way than the blackboard to learn English.</p>

	<p>Tracy and Grace's help.</p> <p>4. Grace helped Tracy a lot to prepare for the tasks, and taught Chad and Howard to accomplish their work.</p>	
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Teacher/Researcher's viewpoint toward the four groups

From the students' performance, the researcher found that the learner-centered instruction was not only a special experience but also a reflection journey about her instruction. From distrusting their abilities to do the presentation to accept their ways to complete their works; from being disappointed their performance to appreciate some effects that students gained from doing the presentation tasks.

From the first class, the researcher had doubts to ask the two classes to do the tasks for the reason that they never had such a learning experience before. To give the students opportunities to communicate with one another and cooperate with their teammates, the teacher/researcher decided to have them discuss in groups in English during class time. The two classrooms suddenly became noisy immediately. Even though some members were on task discussion, some other students could not use the target language; they thus involved in their own talks (Teacher's log, September 23, 2010). Based on the students' performances, there were also some other struggles and disappointments which made the teacher/researcher wonder if bringing the IWB instruction into the classroom was a mistake. For example, the students did not cooperate well. They also complained about the time-consuming nature of the task, and they were afraid that the new English curriculum would delay their plan for preparing the BC Test. Furthermore, the students did not use the IWB well. They only

made some PowerPoint files as their presentation materials, and then imitated the teacher/researcher's daily instruction style as their ways to do the presentations, without interacting with the audience or the other students.

However, after implementing the presentation tasks more times, students learned well not only from preparing for the oral presentation but also from the unit they were assigned to review (Teacher's log, January 18, 2011). Also, students seemed to be impressed by the IWB instruction that they asked the teacher/researcher to continue the IWB instruction at the coming semester. Through the plan, the teacher/researcher had a different point of view and reflection on her teaching approach. From the learner-centered plan, Tim in Class A and Howard in Class D had great progression compared to their usual performance in class, which made the teacher/researcher believed the effectiveness of the plan. Though the teacher/researcher doubted the effects during the plan because of the complaints, conflicts, and the noise from students, some students gradually gained some interests from doing presentations and learning English through the plan, which made the teacher/researcher have confidence and reduce her doubts.

Implementing the IWB instructional plan to students who were under much pressure of high school entrance exam and who were used to teacher-fronted classroom was challenging; however, with this experience, teacher as researcher, two observers, and students as participants all had great impression about it. Although the IWB plan seemed to be effective, there were many problems and difficulties the teacher/researcher faced during the plan, which needed further discussion in the next chapter.

Chapter Five

Discussion

In the previous chapter, the researcher analyzed and compared the participants' learning process and their attitudes toward the presentation tasks. After detailed description of the four focused groups and sixteen participants, three research questions will now be answered based on the data analysis.

Addressing research question 1

The first research question of the study is: To what extent did the students cooperate with each other in the learner-centered instructional plan? The researcher analyzed students' interaction during the preparation of the tasks with the five essential elements of cooperative learning. According to Johnson and Johnson (1999), there are five elements of cooperative learning which are positive interdependence, face-to-face promotive interaction, individual accountability, social skills, and group processing. In the following section, each of the five elements will be described separately to examine students' cooperation style among one another in the learner-centered instruction.

Positive interdependence

The definition of positive interdependence is that each group member needs each other to achieve the mutual goal (Johnson & Johnson, 1999). Based on the performances of the four groups, three of them did not match the principle of preparing the tasks. Jean in Group A, York in Group B, and Dave in Group C were often absent from some presentations. For the reason that Jean and Dave were not

interested in the subject while York had poor relationship with his teammates, these three groups had to complete the tasks without these members. The other group members of Groups A, B, and D all stated in the interview that they were gradually used to cooperating with one another without those three members' participation.

Face-to-face promotive interaction

The principle of face-to-face promotive interaction means, "Individuals promote each other's success by helping, assisting, supporting, encouraging, and praising each other's efforts to achieve" (Johnson & Johnson, 1999, p.71). Group A and Group D both matched the element of cooperative learning. At the beginning of the learner-centered plan, Tim in Group A and Howard in Group D did not assist their group members to complete the tasks for their shy personality and poor English proficiency. However, after the two group leaders kept supporting and encouraging Tim and Howard for a long time, the two members proved that they put much effort preparing for the review task and had great improvement. The two groups showed the effectiveness of cooperative learning which was the teacher/researcher wished to see in the study.

Individual accountability

Johnson and Johnson (1999) stated that "Individual accountability exists when the performance of each individual student is assessed and the results are given back to the group and the individual" (p.71). From the overview of each presentation task, there existed some problems of unequal performance. Each group leader was responsible for the most time-consuming preparation works such as data collection and the typing work. Then they assigned the oral presentation parts to their teammates without asking the group members' opinions. Some team members' opinions were

hence ignored or neglected for the reason that some students were not willing to help or were not capable to provide much help because of their limited English proficiency.

Though the researcher had designed the grading scheme before the review task and had told the students the grading scheme was included in their final scores, some students still did not participate in the task enthusiastically. Another reason was that the low achievers did not understand much English to offer their help, and then they eventually lost their voice and attention in the group. Groups A, B, and C all had the same situation described above. Among these groups, Yvonne and Serena in Group B complained about the unequal job assignment and thought that they were not respected by their group leader, Edward.

Social skills

Based on Johnson and Johnson (1999), “Contributing to the success of a cooperative effort requires interpersonal and small group skills....Persons must be taught the leadership, decision-making, trust-building, communication, and conflict-management skills just as purposefully and precisely as academic skills”(p.71). From the researcher’s observation, when there was a task announced in the class, the students tended to discuss after class and then divided the job into different parts to assign each member to be responsible to. After that, students sent their files to the group leader to combine each part together the day before the presentation day. This way, a task was divided into pieces and the group leaders only combined those pieces together and typed them into the computer file the night before the presentation day. The rest group members reported their own parts at the presentation.

The students' preparation for the tasks was their so-called teamwork. It is possible that without proper training, the students would tend to do a team work in this way. The learning context in Taiwan has long focused on individual learning under the competitive examination systems (Carless, 2007; Littlewood, 2007; Mustafa, 2010; Butler, 2011). Under this educational system, there is seldom time for students to have discussions and coordinate their work. In the study, members in Group B and Group C were lack of social skills. The group leader, Edward, in Group B and Gary in Group C did not communicate with their teammates well to cause some conflicts between them and their group members. Although the teacher/researcher encouraged the students to consult with her whenever they had any problems, listen to one another's opinions, and discuss the tasks together, it did not seem to work for them.

Group processing

The basic concept of group processing is that all group members "discuss how well they are achieving their goals and maintaining effective working relationship" (Johnson & Johnson, 1999, p.71). The participants in the study were like most junior high students in Taiwan who face examination-oriented learning environment; a lot of students spend additional time in the cram school. For the reason that the students had to go to cram school immediately after school, they complained about not having enough time to prepare and discuss for the tasks. In the study, the students could not communicate with one another in class to prepare for the tasks due to the time limitation and the pressure of the tight school schedule. The teacher and the students needed more time to prepare for the task and use the target language to communicate with one another in the plan. However there was another problem when the teacher/researcher first had the students group together to discuss the presentation task.

Although they interacted with one another to discuss how to achieve the task, they soon used their mother language and engaged in their own chatting when the teacher/researcher expected they used the target language to discuss the task. This echoes Carless' study about the mother tongue issue, which is a complicated factor in implementing TBLT in EFL classroom (2004).

Although the students did not have time to discuss how to achieve tasks, the teacher and other students provided feedback to each group after each presentation and in the hope that they would have improvements for the coming tasks. In comparison with the first few presentations, the observer and the teacher/researcher both agreed that the students had some improvements; especially two group members, Tim in Group A and Howard in Group D, involved themselves in the review task and made great progress. Even though there was no time for the group discussion, all group leaders accepted the teacher's advice and asked the group members to change the slide which was too complicated for the audience to see. Moreover, some active students also provided their feedback at the end of each presentation task and made each group improve their presentation style for the next task.

Some practical issues about the present educational environment

The three issues of the free-rider effect, some group members' opinions were neglected, and some conflicts among teammates were all challenges to the teacher when implementing the plan, which will be discussed below.

After the analysis of students' cooperation style using the five elements of cooperative learning, the teacher/researcher found some phenomena when the students encountered the learner-centered instruction. The first one is the free-rider effect (Slavin, 1990; Chiu, 2002). Free-rider effect means some group members do

the most work while others do not share the same responsibility. The four focused groups had the effect described above. The four group leaders were all high achievers and did the most preparation works, including searching for the needed information, typing the information in the computer and then assigning the oral presentation job to their teammates. Take Group A for example, Jean did not participate in the tasks much because she was not interested in her study, and she was absent at the review task; while Tim and Zoe in the same group did not understand much English to provide help. Hence, the group leader, Tina, was responsible for almost the entire preparation work.

The second issue is that with the multi-level students in one classroom, some low achievers' opinions were neglected. Due to the limitation of their English ability, some students had less or even no time to express their ideas in groups. Moreover, similar to other studies (Slavin, 1990; Chiu, 2002), some high achievers ignored low achievers' opinions while making decisions. The situation happened in Groups A, B and D. In Group A, Tina expressed that there was little job Tim and Zoe could do, so she had to do the most works. Like Group A, Chad in Group D confessed in the interview session that he did not know what he could do to help his group for the tasks because he did not understand much English. However, Group B has another problem; Edward assigned jobs to Serena and Yvonne without listening to their opinions and ignored their willingness to participate.

The last one is the conflict in a group because of different opinions and disagreements among group members (Tsai, 1998). York in Group B had strong conflicts with the other two members in his group and it was one of the factors that he stayed away from the class. Another problem was that too many different opinions

caused disagreements among group members as well. Two students in Class B had a quarrel in class because one of the members forgot to bring a flash disk for the presentation. Two students thought the other should be responsible for the failure of the presentation and thus had a fight in class. When some problems existed, the students could easily involve into a fight without thinking of a solution.

Students accept the norm of exam-oriented and teacher-fronted learning environment which was against teacher/teacher's belief in the research

The teacher/researcher used the innovative IWB instruction and in the hope that the students could change their role from passive learning to learn autonomously; however, students got used to the traditional instruction. Under the great pressure of the BC Test and teacher-fronted teaching environment, students had long used to the traditional instruction from the elementary school. The sudden change of new IWB instructional plan accompanied with TBLT did not affect students' learning style much. They have accepted the norm of teacher-fronted and exam-oriented learning context.

When the teacher/researcher did the IWB instruction, the students were at first very excited about it and seemed to accept the new approach. However, when asking them to do the group work and the presentation tasks, the students had many complaints and wished to change back to the original instruction so that they did not have to do the presentations. The teacher/researcher thought they could gradually accept the new instruction and they could learn something different from the process instead of the teacher-centered instruction. The reason why they resisted the presentation tasks might be that they had used to the teacher as knowledge giver to provide them knowledge. All they had to do was to sit quietly and waited for the

teacher's instruction. They were not used to learning and finding the information by themselves, which is the problem worth noticing in the present Taiwan educational environment.

Addressing research question 2

For the second research question: How did an English teacher and her junior high students collaboratively implemented an IWB-supported instructional plan? The question will be answered based on the teacher's log and observers' interview.

The change of teacher's role from a teacher-centered classroom to learner-centered instruction

The first struggle to teacher/researcher was defining her roles during the process of implementing the learner-centered plan. After teaching for seven years, teacher/researcher had used to the grammar translation method and accompanied with a lot of drills to help students practice the sentence patterns and memorize the vocabulary words. When deciding to use the learner-centered instruction, the teacher/researcher had to start changing her role from a dominator to let her students take more responsibilities in class and manage their own learning from the IWB plan. From the teacher's previous teaching experience, teaching English was to focus on grammar, have students practice drills and sentence patterns, and make them memorize the vocabulary words and useful sentences. The majority time was the teacher did the lecturing and the students kept silent until they were asked to read a text or answer questions. The students seldom had chances to express their ideas or shared their opinions in class. Especially, when the students were the 9th graders, the teacher was under the great pressure to complete the course before the end of the term and at the mean time reviewed the lessons for four mock exams in the semester.

The next change was that she had to decrease her lecturing time and increase the students' presenting time. At the beginning of the IWB instruction, the teacher/researcher tried to manipulate the IWB well and had students involved in her instruction more by having them interact with the IWB. In order to balance the rushing for the school schedule and doing task-based instruction, the teacher/researcher had a compromise instruction. When teaching the grammar pattern, the teacher used the PowerPoint and the handout as the supplementary materials; meanwhile, with the assistance of the program embedded in the IWB which has some more exercises for the students to do for practices. After finishing teaching a unit, the teacher/researcher facilitated the students' learning interests based on some authentic materials related to the topic of the unit, and had the students discuss and provide the topic for the coming presentation. That was the reason why the teacher/researcher needed to save time for the students to discuss about the topic for the coming presentation tasks.

The pressure from the students' performance during the whole plan was another struggle for the teacher/researcher. When the students were doing tasks, the instructor also monitored the students' progress and served as an adviser to help them solve some problems. To give students more opportunities to engage in genuine communication and have authentic materials to learn from, the teacher/researcher designed some real life tasks for them to do the presentation, such as listing ten ways to reject a boy, creating a dialog of it, or introducing a culture of a foreign country. The teacher/researcher hoped that students could learn more from these authentic materials than from the text book. When designing these tasks, the teacher asked the students for their opinions and asked them to come up with topics that they had

interests in. However, the teacher had struggles between her roles during the whole process of the plan. Besides the reason that the students did not perform as well as the teacher/researcher had expected, the conflicts among group members, and the tight school schedule all gave the teacher/researcher a lot of pressure and struggles and made her consider the question whether to continue the plan or not.

As the teacher/researcher started the plan, she tried to have students offer more opinions in class, but some problems arose in the two classes. It is described in the preceding chapter that students in Class A were quieter and had no response while students in Class B were noisier and liked to express their opinions. So when the teacher/researcher taught class A, she found the difficulties to encourage learner autonomy whether it was in learning or offering their opinions. The teacher kept describing the problem in the teacher's log.

The problem in Class A was that they didn't have responses. Whether I told them to read the dialog, repeat the sentences or answer my questions, they didn't want to say anything but only two or three students would answer. However, the students who answered me didn't have loud voice, so I usually couldn't hear them. This way, it was very difficult to teach them. It was just like my own show and they don't want to cooperate with me.

(Teacher's log, October 18, 2010)

The teacher/researcher kept encouraging the students to learn more actively from the plan, and hoped that they could learn more than only from the textbook; still the students frustrated the teacher/researcher very often by staying passive.

Although the teacher/researcher faced problems and struggled to continue the IWB instructional plan, she still tried to provide opportunities and design some

interesting tasks to facilitate the students' interests through her instructional plan.

Students' reactions from the grammar teaching approach to learner-centered instruction

The students felt nervous and doubted about the new IWB plan at first. In the first class, the teacher/researcher announced her IWB instructional plan to the students and claimed that she would let them have opportunities to be a part of the project. As the teacher/researcher predicted, the students all felt surprised and doubted whether they could do the tasks or not. They felt nervous about the progress of the tight schedule as well. The teacher/researcher had to promise that the IWB plan would not delay their schedule to make them release their tension.

After utilizing IWB for instruction, the students were gradually interested in it and enjoyed some functions the IWB provided for them to understand the sentence patterns and see the reading more clearly. Meanwhile, the students had difficulties in doing the presentation tasks. At the beginning of the IWB instruction, the students were attracted by the IWB lecturing, but they tended to resist doing the tasks. It seemed that the students had used to the teacher-centered instruction and had no ideas about what to do for the tasks, not to mention knowing how to cooperate with the teacher for the IWB plan.

The reason why they still couldn't take control of their learning in class could be the traditional teaching methods they had accepted from their learning experience. From their prior learning experiences, all they had to do in class was to keep quiet and learned what the teachers taught. They didn't really have a chance to speak up for themselves and negotiated with their teachers on how they should learn. The way was totally spoon-fed

education and they had got used to it. Now I had to find ways and kept trying to change my English class as well. (Teacher's log, September 17, 2010)

Due to the fact that the students did not have any references from their prior learning experiences, they felt panic and consulted with the teacher/researcher more often than before.

In the meantime, after cooperating with one another to accomplish some tasks, some students had a sense of achievement and enjoyed the learner-centered instructional plan, especially some high achievers. One of the students in Class A told the observer that she had told her aunt in the USA about the IWB instruction, and she liked it very much. She learned more from the IWB and the learner-centered instructional plan, and the process of preparing the presentation tasks, which she never experienced before. The student can be viewed as having autonomous learning in the plan. Furthermore, most students in Class A and B approved to continue the IWB instruction for the coming semester.

Though most students enjoyed the plan, some of the students did not have interests in it. The American Psychological Association Board of Educational Affairs (2005) proposed the third category of learner-centered model as "Developmental and social factors that emphasize positive learning climates and relationships in establishing a social context that facilitates meaningful learning, and also focus on identifying developmental differences within and among learners"(as cited in Salinas & Garr, 2009, p.227). There are three students in Class A and Class B who did not involve in the plan much because of their absence from class. For the reason that these students did not engage in their studies and then escaped from school, the learning

climate and relationship did not keep them stay in the plan. The teacher/researcher felt frustrated and pity that not all the students participate in the plan and the IWB did not pull them back to English classes. (Teacher's log, November 29, 2010)

Interactions between the teacher and students in the plan

When the teacher/researcher used the IWB instruction at the beginning, the students were very excited about it and seemed to be motivated by it. Yet, some problems happened between the teacher/researcher and her students during the process of implementing the IWB plan. When the teacher/researcher did the lecture in class and offered the students more chances to state their opinions, the students in Class A tended to stay quiet while students in Class B had many unrelated talks. Therefore, when the teacher/researcher taught Class A, she had to encourage the students much and waited for a long time before offering her some ideas. In the meanwhile, in the Class B, the teacher/researcher had to listen to many of their ideas and tried to stop some students' nonsense speech. Both situations sometimes made the teacher/researcher become impatient in class and want to stop the IWB plan.

In the learner-centered instructional plan, the students are viewed as active learners and are capable of deciding their learning. The students interacted with the teacher/ researcher more often in the beginning of the semester because they were not familiar with the presentation tasks and felt excited about it; nonetheless, they soon grew weary of doing tasks.

The students seemed to be tired of doing tasks and didn't have any interests of reporting because they thought that making a report was a burden to them. They usually prepared the report the day before the presentation and thus many typos could be seen on their display and errors

happened at their oral presentation. It seemed that they didn't take the presentation seriously. (Teacher's log, January 7, 2011)

The teacher/researcher found the students felt stressful and bored with the tasks as a part of their assignments. Some students complained about it in class, which made the teacher/researcher felt thwarted in the students' performance. In spite of that, the teacher/researcher still encouraged the students to continue doing the plan, and finally they did a good performance at the last cycle of the task, which was the review task. As the observer stated that students might have presumption before the plan and thought that they could not achieve it, but they would eventually learn something through the plan.

From the experience, the teacher/researcher discovered that with the learner-centered instruction, there were more interaction between the teacher/researcher and the students compared with the teacher-fronted instruction. This made the relationship between the teacher and the students more intimate than before. Though there were some struggles and obstacles for the teacher and the students during the plan, they collaboratively accomplished the plan.

Addressing research question 3

The last research question: After three cycles of implementation, what insights did the teacher/researcher derive from the experience which helped her think [differently] about her existing teaching practice? The researcher will answer the question in four parts based on the teacher/researcher's log and two observers' interviews and the students' opinions from the interview session.

The teacher's reflection after implementing the IWB plan

The teacher/researcher had some different thoughts derived from the students'

performances after the plan. The first one was some challenges the teacher/researcher faced during the IWB instruction. The second one was the effectiveness the IWB brought to the students. The third one was the way the students utilize the IWB. And last but not least was the different viewpoint before the design of plan and after the teacher/researcher's implementation.

During the IWB plan, the teacher/researcher had to face many challenges and problems happened from the students and the IWB, which frustrated her and made her think of some solutions to solve these problems. Analyzed with the five elements of the cooperative learning by Johnson and Johnson (1995), there were some problems when the students tried to work together to achieve the presentation tasks. The most obvious one was the conflicts among some teammates. York in Class A had serious conflicts with his classmates, especially with his group members. Lacking interest in his study and having disagreement with his teammates made him alienated from the class and also made him not willing to be a part of the plan. Another problem was some low achievers' opinions being ignored in the group. The students such as Zoe in Group A, Yvonne in Group B, Molly in Group C, and Chad in Group D, whose English ability was too low to provide help for their groups, and they could not offer opinions for the presentations, hence their opinions were usually neglected by their teammates. There were also issues with poor leadership between the leaders and their group members. Most of the leaders did the most time-consuming preparation work such as searching for the needed information, assigning the oral presentation roles to the group members, teaching the low achievers how to do oral presentation in addition to share one part of the presentation work with their teammates. The group leaders often complained about doing too much because some of the teammates did not share

the responsibility or were too passive to accept the assigned job. The group leaders of Group A, B, and D had the problems described above, while the group leader of Group C did not monitor the preparation process well for the presentations. The learner-centered plan was first introduced to the students when they were 9th graders, and they had never experienced the plan before, so the students did not know what to do, not to mention how to cooperate well to accomplish the tasks. The students tried to search for ways to complete the tasks together; meanwhile, they had complaints about wasting too much time preparing for the tasks. Due to the fact that the students were under the pressure of the BC Test, they doubted if the plan would reduce the teacher's lecture time and wasted their time preparing for a lot of tests and exams, so they wished to change back to the original grammar-translation method. These struggles and doubts existed during entire implementation of the plan.

There were also some problems of the IWB during the instruction which challenged the teacher/researcher as well. The problem that students complained most of the IWB was the sun reflection, which matched Quashie (2009) and Smith et al. (2005) study. Moreover, there were still more problems interrupting the students' presentation tasks and the teacher's instruction. The first one was that the technical problem of the IWB made the review task become chaos, which the teacher also had to deal with it in her instruction. The first group in Class A encountered hardware problems. While the first group was doing the review task, the positioning function suddenly lagged and they had to stop reporting until the teaching assistant, Tina, to re-position the IWB. At the time the IWB lagged, the students could not change the display to show the review material they made, all they could do was to wait for Tina to recover the positioning function, and then they could continue their presenting. At

the interview session, the students in the first group complained about technical problems of the IWB which wasted their presentation time. The teacher/researcher told the students her experience of having instant reactions when some problems happened during her IWB instruction, which the students also needed to learn when doing the presentation tasks.

As the teacher/researcher described in the previous section that the positioning function of the IWB lagged at the review task, some problems also happened during the teacher/researcher's instruction. When the teacher/researcher used the number choosing program of the IWB, it always chose the same number again and again, which made the pupils laugh loudly. In addition, another countdown program also had problems. When the teacher designed a grammar matching game, she also put a countdown clock on the same interface to limit the time for answering. Yet, the clock did not work when the students started to play the game, the teacher had to look at her watch instead in order to keep the game going. These were some unpredictable problems happened during the teacher/researcher's instruction, showing that some of the functions are not reliable. These problems pushed the teacher to manage the problems as soon as possible while figuring out some ways to manage classroom order.

Facing IWB problems during the plan, the teacher was eager to find the support; however, she could not find help. When the teacher/researcher first integrated IWB in the instruction, the students all showed high interests and were attracted by its single-touch functions and programs embedded in it. After using IWB instructions for one month, the students lost their interests. The teacher/researcher had to design some games to provide more opportunities for the students to interact with the IWB and had

them engage in the instruction. In the meanwhile, the teacher/researcher was the first one who used the IWB in the school and there was only one IWB workshop during the whole semester held by the Education Bureau, which means the teacher/researcher had no resources to improve her IWB instruction. The IWB instructional plan needs more collaborative teachers to design and develop more and better ideas. This way, the IWB instructional plan would be more practical and suitable for the existent school. The three problems of hardware, students' short period interest in IWB, and teacher's lack of resources all echoed the previous studies (Cogill, 2002; Glover & Miller, 2001; Gray et al., 2005; Smith et al., 2005).

In spite of some problems happened during the instruction and the presentation tasks, there were still benefits that the IWB brought to the classroom. The effectiveness of the IWB instruction includes time-saving for the preparation to change the multimedia display, and many authentic materials could be introduced through the IWB. The easy change of the IWB display allowed the teacher/researcher to have more time interacting with the students. The multimedia display attracted the students' interests to interact with the IWB as well. The low achievers like Tim, Chad, and Howard were able to do exercises on the IWB instead of answering the teacher/researcher's questions. What's more, with the IWB connected with the laptop, the teacher/researcher was able to show more authentic materials from the Internet than only showed the pictures from the textbook. The functions which the IWB provides increased the students' motivation to learn English. The conveniences of the IWB instruction offered the teacher/researcher and the students more opportunities to experience a variety of teaching techniques compared with the traditional one. The advantages of IWB such as the multimedia display, time saving without erasing the

board and have more time to interact with students that some researchers (Bennett & Lockyer, 2008; Cogill, 2002; Gray et al., 2005; Hodge & Anderson, 2007; Quashie, 2009; Smith et al., 2005) stated all happened in the teacher/researcher's classroom.

Another reflection was the different thoughts after seeing some effects the students gained from the plan. As the researcher designed the learner-centered instructional plan before the study, she expected that students would benefit from the innovative IWB instruction which they never had before. Though the teacher/researcher had expected some effectiveness to happen on the students before her IWB instructional plan, she also had some doubts. The teacher/researcher had long been used to the teacher-dominated instruction; it was a challenge for the teacher/researcher to change her teacher's role from a language instructor to a facilitator. She had to trust her students to cooperate together to complete the tasks and hope that they could become autonomous learners through the plan. However, after implementing the plan, the teacher/researcher found it was a good change for both the teacher and the students. The IWB instruction was a more convenient way to do the instruction because the content of the book and the answers of the exercises could be seen in the display clearly by the single-touch function. The teacher saved more time interacting with the students instead of writing words on the blackboard and managing the students' discipline in the mean time. Also, the teacher and the students could have more time to communicate and negotiate about the topics for the tasks, which eliminated the boundary between teacher and the students in the Confucian-heritage learning environment. The teacher felt that students were more willing to ask and discuss some questions with her.

When the students implemented the IWB plan, the teacher/researcher had

expected they could utilize more functions of the IWB; however, they did not make the best use of it. As the teacher used the IWB for instruction, she tried to manipulate and demonstrate some functions the IWB provided for the students to see. As the teacher's surprise, when the students did the presentation tasks, they treated the IWB as a screen only to project the material from the computer. The only function they utilized of the IWB was its single-touch function to change the display. Among all the groups, one group used the IWB to get on the Internet for the other students to see a short video from YouTube as their supplementary materials. It seemed that students' pressure mainly came from completing the presentation tasks, so they put emphasis on how to achieve the tasks rather than focusing on the manipulating the IWB. Maybe it was the reason why the students treated the IWB as a screen without making the best use of the functions that the IWB provided.

The last reflection was the pressure from the students' performances, which made the teacher keep struggling whether to continue the plan or not. When first implemented the IWB instruction, the teacher had to be familiar with the programs which IWB provided and changed her role from a teacher to a facilitator. The instant change of the instruction style made the teacher/researcher felt not used to it. The students' performances disappointed the teacher/researcher at first no matter how many times she gave them advice after the tasks. Meanwhile, the students' complaint about the time-consuming preparation work for the task was another struggle for the teacher. Because the students were 9th graders who were under great pressure of preparing for the BC Test, they were worried that doing the tasks took them too much time from their study. The students' performances and complaints gave pressure to the teacher/researcher and caused her to feel disappointed from time to time until some

positive effects appeared: The first positive effect was that the students started to enjoy the learner-centered instruction and did better presentations. After many times of practices, the students had more experiences of doing presentation tasks that they did the tasks better than they did at the very beginning. The layout on the computer and their oral report were clearer for the audiences to understand. To the teacher/researcher's surprise, some group members started to engage in their groups and had good performances at the review task, such as Tim in Group A, Chad and Howard in Group D. These students held positive attitudes and good impressions toward the plan, which they stated in the interview session. Seeing the changes from the students, the teacher/researcher gained some confidences and gradually believed that the effectiveness which the plan brought on both the teacher/researcher and the students.

Limitation of the existing educational environment

The students' use of the mother language during the discussion was a problem, which the teacher/researcher thought it was a limitation of the plan. The teacher/researcher first asked the students to sit in groups using the target language to discuss about their first task. Before letting students sit in groups, the teacher/researcher encouraged the students to ask the teacher/researcher if they had difficulties communicating in English. Also, the teacher/researcher told the students that she would walk around the classroom to see if they needed help and checked if they actually spoke English. When students started to communicate, only group leaders tried to speak English while others stayed silent or spoke their mother language. Though more students tried to use the target language and discussed about the task they were going to present, there were still many students engaged in their

own talks in mother tongue. The same issue can be found in Carless' study (2004), when students using mother tongue may led to their chatting which was unsuitable to the tasks.

Another problem when students grouped together was the classroom discipline. Like other Confucian-heritage learning environments in Asian, it is the teacher's responsibility to maintain a quiet class during instruction (Careless, 2004; Li, 1998). When first doing the group discussion, besides checking the students' communication process, the main concern of the teacher/researcher was to lower their voice in class. What's more, the students were all 9th graders who had to face the BC Test on the second weekend of May. This means the entire curriculum must end before May, which caused a very tight schedule. Under this circumstance, the teacher/researcher did not have more time for the students to do the discussion. Hence, the teacher/researcher decided not to have class discussion time at all. The students had to prepare their work after class.

From the teacher/researcher's perspective, students' mother language can be accepted if they used it in carrying out the tasks instead of turning into irrelevant chitchat among their teammates. The teacher/researcher felt that she should always encourage and provide help when the students needed. The second issue related to classroom management.

During the learner-centered instruction, the teacher/researcher ought to inform the classes nearby and the teachers who taught them. After asking for their understanding for the noise that the learner-centered instruction might cause, the teacher/researcher should also have maintained the discipline by paying more attention when the students did the discussion. The last problem is the time limitation

of doing the learner-centered instruction. When interviewing with the observer, she mentioned that this project could be practiced in the 7th or 8th grade. This way, there is no need for rushing the schedule.

Influence on colleagues to have different thoughts on IWB instruction

As the researcher stated earlier that she was the first one who used the IWB two years after it was installed in the school. When the teacher/researcher asked the Section Chief of Information Technology for help, he was glad that IWB could finally start to be used. Another cooperative English teacher was surprised when the teacher/researcher told her about the IWB instructional plan at the beginning. After observing the IWB instruction for a month, she found the advantages of it. At the interview, she talked about her opinion about the IWB instruction.

I think it is a trend [to use IWB for instruction]. I saw a lot of your class performance and I think that IWB has its convenience. Since it is a trend, we should learn it. The way you let students do the presentation should be introduced to other teachers. You should share your experience to everyone at the conference at the end of the semester. Now that you are using the IWB for teaching, you can teach us. I suggest that you can share your viewpoints at the next conference. (Observer's Interview, January 1, 2011)

The observer showed great interest after seeing the teacher/researcher's IWB instruction and asked her students if they wanted to try. She herself wanted to learn to use the IWB but was afraid that it would take her too much time to really understand how to use the IWB in class. When the teacher/researcher suggested her ask the Section Chief of Information Technology for help, she indicated that the Chief's expertise in technology was too high that he may not understand her

needs and her poor ability on computers.

What's more, after the teacher/researcher invited some other English teachers to see the first cycle of the review task, they asked the teacher/researcher about her IWB instruction and its effect, which means they started to pay attention to the IWB at school. The teacher/researcher's use of IWB affected the English teachers to think about the possibilities of using IWB for English instruction and they would like to try it if they could learn to use it and have an IWB in their classroom.

The IWB instruction in some schools

Having only a few IWBs in the school could lower the teachers' interests to integrate it into the instruction. Although the MOE strongly promotes IWB being integrated into the school curriculum, it is not available in every school. Some schools in urban districts have two to three IWBs at school but are installed in the so called E-learning classrooms which are far away from students. If a teacher wants to use it, s/he has to take the students to the classroom, which takes more time than they stay at their own classrooms. Moreover, the only teacher who can manipulate the IWB may be the Section Chief of Information Technology or the Section Chief of Equipment.

The situations described above also happened in the teacher/researcher's current school. When the teacher/researcher started teaching in the present school, she had just finished her IWB plan and was eager to continue her IWB instruction in the new school, which she had transferred to two years ago. However, after knowing that the classrooms with the IWB were too far away from her students' classrooms, she gave up the idea. Maybe this is the main

reason why IWB instruction was not common to all schools. In the teacher/researcher's opinion, the MOE has to purchase more IWBs to install in more classrooms and provides teachers who have interests or are willing to learn the IWB instructions some chances to learn it well. Two to three workshops per semester are not enough; instead, some conferences taught by the experienced teachers who have taught with IWB for years are more useful for the novice teachers. In the conference, teachers can manipulate the IWB and share their opinions with one another. These are practical ways to attract more teachers to start using IWBs for instruction.

Summary of the chapter

In the chapter, three research questions were answered based on the students' and observers' interview, and the teacher's reflection log. The first question was addressed according to students' cooperative process during the plan under the five elements of cooperative learning. After analyzing the students' performances, the researcher found that without proper training and relevant experiences, the students tended to separate the preparation work into small pieces for each group member to complete without the need for discussion. Most leaders shared the most work and had complaints about this while other group members felt that they were not respected because their leader took the overall control without asking their opinions. Also, conflicts among group members was another challenge for the teacher when she implanted the IWB plan.

The second researcher question was conferred in three aspects, in the teacher's log, the students' reaction and the interaction between the teacher/researcher and her students. The teacher had struggles to change her role

from a dominator to a facilitator, and she also had to decrease her lecture time for the students to have more interaction with the IWB. The teacher did not used to these changes at first. However, after seeing the students gain some confidence from doing the presentation tasks and that the students interacted with the teacher more than before, the teacher and the students started to have positive attitude toward the plan.

The last question was the expectation before the plan and thoughts after the plan, which made the teacher re-examine her instructional style in class and her thoughts on her students. During the whole plan, the struggles and the students' attitudes frustrated the teacher/researcher a lot at the beginning of the plan. Some technical problems from the IWB happened during the presentation tasks made the teacher eager to find some solutions or other teachers to consult with. However, the teacher was the first and the only one utilizing the IWB for instruction; she had to find the solutions by herself. She thought the plan ought to have more supports from other teachers. Despite some technical problems, there were indeed some benefits that the IWB offers to make the instruction more convenient and facilitates the students' interests, particularly its single-touch function. However, during the whole plan, the students did not make use of the functions embedded in the IWB for their presentations. The researcher felt pity that the students did not make the best use of the IWB and had more interaction with the IWB. Also, there were still some restrictions when implementing the plan. The students' limited English proficiency, tight school schedule, and a few numbers of the IWBs installed in the classrooms might be the main reasons why the IWB instruction did not popularize in junior high school.

Chapter Six

Conclusions

The present study was a case study to investigate the students' learning process and changes occurred when the new innovative tool, the Interactive Whiteboard (IWB) was used and brought into the language classrooms with the learner-centered instruction. Based on the experience of implementing the IWB instructional plan, the researcher first gives a summary of the findings, and then pedagogical implications, limitations of the study, and suggestions for further studies will also be included in this chapter.

Summary of the findings

The purpose of the study was to investigate the changes of sixteen 9th graders who belonged to four different groups of two classes when the teacher/researcher utilized the IWB and integrated it with the learner-centered instructional plan for a semester. The students formed a group of four members learning to manipulate and interact with the IWB in order to do the presentation tasks which were related to each unit of the textbook. More importantly, each group was responsible for a review task before each monthly test followed by an interview conducted by the teacher. The findings were derived from the analysis from the teacher's log, two observers' and the participants' interview after each cycle of the review tasks. The findings were divided into three parts as the benefits and problems of the IWB instruction, issues from the processes of the students' cooperation, and the problems when implementing the plan under the current educational environment.

The IWB had positive effects on students' learning. At the beginning of the learning, the teacher only used the program file embedded in the CD-ROM which the textbook publisher provided. Slowly, the teacher designed some games from the IWB program, *i.e.*, sentence matching game and word-spelling basketball game. The students' performances in the present study matched the previous studies of CALL and IWB, using the new IWB instruction enhanced the students' motivation toward learning (Beauchamp, 2004; Cogill, 2002; Fotos & Browne, 2004; Hodge & Anderson, 2007; Lee & Noh et al., 2011; Quashie, 2009; Smith et al., 2005; Türel & Johnson, 2012; Wang, 2011); some low achievers were willing to do the practice on the IWB even though they could not answer the teachers' questions, *i.e.*, Tim in Group A and Howard in Group D. Moreover, with the IWB in class, the teacher were able to introduce more authentic materials to the students, which made them engage and learn more in class according to the students' feedback from the interview. The interaction with the IWB and some interesting functions the IWB provided for the instruction facilitated the students' learning interests.

However, some other problems with the IWB affected the plan as well. The size limitation was one of them. The limited size of the IWB could not show enough answers of the exercises or some example sentences of the sentence patterns for the students, while the traditional blackboard could. The sun reflection was another problem. Some students complained about it because they sat in the corner of the classroom. Even though there were curtains to block the sunlight, there were still some students could not see the IWB clearly; hence, they had to move their chair to somewhere they could not be blinded by the sun reflection when the teacher conducted the IWB instruction. Meanwhile, the curtains made the classroom become

dark and then made the students feel sleepy easily. The last one was the technical problems, which affected the students' presentations and the teacher's instruction. The lag of the IWB positioning function and the computer program interrupted the instruction, and the teacher had to think of solutions immediately and maintained the classroom order in the same time. These problems disturbed the teacher's teaching process.

On the other hand, the students were lack of experiences to achieve the tasks and caused some conflicts among one another. The students were long under a great pressure of pursuing their personal success of their studies. They had never been given chances to learn and cooperate in order to achieve some mutual goals; therefore, they did not know how to do cooperative learning and accomplish the presentation tasks. When doing the presentation tasks, the students tended to separate the works into pieces and finished the assigned works without working and discussing together. Under this circumstance, some conflicts and disagreement happened during the plan. The group members complained about the unequal job assignment while the group leaders complained about doing too much work. This was because the students did not communicate well when having the team work. The lack of relevant experience and leadership taught by the teachers, the students had difficulties in managing the presentation tasks.

Even though the teacher/researcher tried to integrate the IWB into her instruction and hoped that the students could learn more from the plan, the students seemed to care more about their academic performances. The students were worried that the plan would decrease their study time to prepare for the tests and then affected their grades. Although the teacher announced to the students that the presentation tasks would be a

part of their final scores, the teacher found that they still pay more attention to the tests. Therefore, the complete grading scheme might facilitate the students learning interests toward the plan.

Pedagogical implications

After implementing the plan and observing the students' performances, the results revealed that some factors affecting the students' performances during the IWB instruction, which included cooperative learning, students' learning motivation, and the limitations from the current educational environment. Meanwhile, the other teachers' support and share of teaching materials would be important for the plan as well. When the students first experienced the learner-centered instruction, the teacher needs to monitor their learning process and provide them some advice and help. In addition, the teacher ought to guide the students how to achieve the cooperative learning due to the fact that they tended to do individual work instead of cooperating to accomplish the tasks. The students had been used to searching for their own success in the current educational environment, thus they did not know how to execute cooperative learning. From the present study, the students had disagreement, conflicts and some group members felt that they were not respected when preparing for the presentation tasks. For the fact that the students were lack of skills to do cooperation work, the teacher is advised to constantly be the students' adviser and provide the students with needed skills which meet the principles of the cooperative learning. When the students could fully execute the cooperative learning, they could learn more autonomously.

Next, with the IWB instruction, students' motivation could be initiated when learning English. The IWB provided multimedia display which facilitated students'

interests to learn. Moreover, the students who were unable to answer questions or do exercises on the blackboard were willing to do exercises on the IWB because it provided possible choices for the students to touch and then move them to the designate blanks, which was an entertaining function for them. The touch sensitive function and the interesting program that the IWB offered gave the students more possibilities to answer questions correctly, especially some low achievers. They may not understand much English to answer or do the exercises, but with the IWB's help, they had chances to answer the questions correctly, and thus they could gain some confidence from it. In other words, utilizing the IWB for English instruction could facilitate students' motivation to learn not only some motivated learners but also students with poor English proficiency.

Also, when incorporating the IWB and learner-centered instructional plan, the teacher could increase the proportion of the grading scheme and decrease the proportion of the homework and tests to make the students have more time to involve in the plan. Although the IWB and the learner-centered instructional plan seemed effective for the students, the pressure from the high school entrance examination reduced the students' willingness to prepare for the presentation tasks. The current educational environment puts emphasis on the written exams, which made students not pay attention to the plan. The students were worried about the upcoming tests and exams; hence, they did not put much effort on the presentations. The students emphasized on the scores they could obtained from their tests and homework more even when the teacher/researcher incorporated the tasks into the grading scheme. Therefore, even though the students gained benefits from the IWB plan, the pressure and the limitation from the current educational environment might decrease

effectiveness of the plan.

Last but not least, it would be better if teachers have a teaching community to share the experience and teaching materials for the IWB plan. With more teachers involve in the plan, there could be more supports and resources for the IWB instruction. Consequently, more studies are needed to gain more insights from other teachers and students when they collaboratively implement the IWB plan for English instruction.

Limitations of the study

There are some limitations of the study. The first one is the time limitation. The case study lasted for 21 weeks. There were some challenges and achievements observed from the students' performances of doing the presentation tasks. If the study lasted for a school year, there might be more changes to be observed from the students when they cooperated together to accomplish the tasks.

The second limitation is the participants. The study only revealed specific students' performances and outcomes of the IWB plan. More students and teachers should be included in the study, therefore, more interactions among the students, between the students and the IWB, and the students and the teachers can be observed.

Suggestions for the further studies

After implementing the IWB plan, there are two suggestions for the further studies. The participants were 9th graders who were under the great pressure of the high school entrance examination, so they did not have more time to do the preparation for the tasks. It is suggested for the further study that the participants could be the 8th graders. They could have one year of training in English proficiency and have more time to prepare for the presentation tasks. Furthermore, it is suggested

for the future study that the researcher played the role as an observer to have different viewpoints and suggestions for the teacher when carrying out the plan. Instead of being both a teacher and researcher, the researcher could be an observer to provide more opinions for the teacher who implements the learner-centered instructional plan. Although the teacher being the researcher could derive findings from personal experiences and insights from the plan, the researcher being an observer could provide different point of view for the teacher in the study.

Conclusion

Recently, the MOE strongly promotes the IWB integrated into English instruction. However, workshops are still insufficient for the teachers to conduct IWB instruction in their classes. Besides that, different atmosphere of each class is another essential factor to influence the effectiveness of IWB instruction. The present study emphasized the process of the teacher/researcher implementing the IWB and integrating learner-centered instruction on 9th graders who were under the specific circumstance of intense school schedule and the high pressure of entrance exam. The result showed that the IWB integrating learner-centered instruction was a feasible plan to facilitate motivation in learning English although many challenges still existed. It is the author's wish that more studies can be done in this new tool so that teachers will gain a deeper understanding of its impact on student learning.



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Appendix I

Lesson plan

I. Course Description :

A. Units in the textbook and the content

Unit 1: *Dennis Was Bitten by a Snake.*

- a. Grammar: Passive Sentence, Modal Auxiliary (may, can, must, should)
- b. Extension Activity : Noah's Wild Animal Park News

Unit 2: *It Has Been Very Hot, Hasn't It?*

- a. Grammar: Tag Question
- b. Extension Activity : Weather Report

Unit 3: *I'm Interested in Flying.*

- a. Grammar: Past Participle and Present Participle as adjectives
- b. Extension Activity : Classified Ads

Review 1 : Units 1~3 (Data Source)

Unit 4: *She Is the Girl of My Dreams.*

- a. Grammar: Prepositional Phrases as adjectives, Relative Pronouns as Subjects
- b. Extension Activity: How to reject a boy/girl's love confession

Unit 5: *This Is the Fair I Have Waited For!*

- a. Grammar: Relative Pronouns as objects, used to
- b. Extension Activity: Book Review

Unit 6: *If We Cheat, We Will Never Learn!*

- a. Grammar: Dependent Clauses (if, when)
- b. Extension Activity: None

Review 2 : Units 4~6 (Data Source)

Unit 7: *I Know She Wants the Best for Me.*

- a. Grammar: Noun Clauses (that), so...that...
- b. Activity: Issues about argue with parents and how to solve the problems

Unit 8: *Tell Me What the Biggest Difference Is.*

- a. Grammar: Noun Clauses (whether, if), Noun Phrases (whether, if)

b. Activity: Introduce a country and its characteristics

Unit 9: *I Won't, Either.*

a. Grammar: Agreement and Disagreement (so, too, either, neither)

b. Activity: Zodiac Signs

Review 3 : Units 7~9 (Data Source)

B. Activities and assignments in each unit

Four skills (listening 、 speaking 、 reading 、 writing) accompany with an IWB were integrated in each unit. In each class, the IWB was the main display for the course. Students were asked to interact with the IWB by manipulating it, teaching a section or shared the product of the task on it.

II. Textbooks and Other References :

- A. Hess Textbook (Book 5)
- B. Taipei Zoo website <http://newweb.zoo.gov.tw/default.aspx>
- C. Central Weather Bureau website <http://www.cwb.gov.tw/V6/index.htm>
CNN Weather <http://weather.edition.cnn.com/weather/intl/forecast.jsp>
- D. China Post (Classify aids) <http://www.chinapost.com.tw/classifieds/>
- E. Google <http://www.google.com.tw>
- F. The New York Times <http://www.nytimes.com/pages/books/index.html>
- G. Teen Issues <http://www.teenissues.co.uk/arguingwithparents.html>
- H. Taipei International Book Exhibition <http://www.tibe.org.tw/new/>
- I. Table Manners video
- J. Menus of the pizzeria

III. Course Schedule :

Week	Date	Content/ Activity	Assignment
2	9/6	Workbook (p.2-9) 1. Check answers of workbook 2. Listen to listening practice 3. Explain the tasks 4. Divide the groups	
	9/8	Unit 2: <i>It Has Been Very Hot, Hasn't It?</i> Pattern 1 (p.18-19) 1. Check mock exam 2. Teach pattern 1	Handout
	9/9	Pattern 2 (p.20-21) 1. Review pattern 1	Book p18-21

		2. Do exercise 3. Teach pattern 2 4. Check answers of exercises	
	9/10	Warm-up (p.13), Dialog & New Words (p.14-15), Theme Words (p.16) 1. Check the test 2. Check homework 3. Teach warm-up 4. Teach new words 5. Choose the city for weather report	1. Write the vocabulary 2. Quiz next time
3	9/13	Theme Words (p.16-17), Reading (p.22-23) 1. Quiz (vocabulary, dictation) 2. Teach theme words 3. Teach reading	Exercise book p 9-12
	9/15	Reading (p.22-23) 1. Check the test 2. Check exercise book 3. Teach reading	1. Write the vocabulary 2. Quiz next time
	9/16	Try It (p.24) 1. Quiz (vocabulary, dictation) 2. Teach try it 3. Group discussion for the coming task	1. Exercise book U2 2. Workbook U2
	9/17	Task: Weather Report 1. Presentation 2. Feedback Workbook (p.10-17) 1. Check answers of the homework 2. Listen to listening practice	
4	9/20	Unit 3: <i>I'm Interested in Flying.</i> Pattern (p.30-31) 1. Teach pattern on the IWB 2. Review it by the handout	1. Handout 2. Book p31
	9/22	Mid-Autumn Festival	
	9/23	Pattern (p.30-31) 1. Check answers of the homework 2. Introduce about classified aids 3. Group discussion about the task	
	9/24	Warm-up (p25), New Words (p.26-27) 1. Introduce some jobs by ppt 2. Exercises of eth jobs 3. Teach new words	1. Write the vocabulary 2. Quiz next time
	9/27	Dialog (p.26-27) 1. Quiz (vocabulary) 2. Teach dialog 3. Do exercises	Quiz next time
5	9/29	1. Quiz (dictation)	

		2. Check two tests 3. Games of the jobs	
	9/30	Theme Words (p.28-29), Reading (p.32-33) 1. Teach theme words 2. Do exercises 3. Teach new words 4. Teach reading	1. Write the vocabulary 2. Quiz next time
	10/1	Task: Classified Aids 1. Presentation 2. Feedback Reading (p.32-33), Try It (p.34) 1. Quiz (vocabulary) 2. Teach reading 3. Do exercises 4. Students share the answer 5. Teach try it 6. Review for the mock exam	1. Exercise book U3 2. Workbook U3
6	10/4	Workbook (p.18-23) 1. Check answers of the homework 2. Listen to listening practice	Book p35-36
	10/5	Mock Exam	
	10/6	Mock Exam Review 1 (p35-36) 1. Check the answer 2. Students do the Q&A 3. Arrange seats for the presentation task	Workbook p24-25
7	10/8	Workbook (p24-25), Pattern1 (p.42-43) 1. Check the answers 2. Teach grammar of Pattern1 on the handout	
	10/11	Task: Review U1~3 (Data Source)	
	10/12	First Monthly Exam	
	10/13		
	10/14	Unit 4: <i>She Is the Girl of My Dreams</i> Pattern1 (p.42-43) 1. Check the answer of the exam 2. Do the exercises 3. Discuss and give feedback about the first cycle task	
	10/15	Pattern 2 (p.44-45) 1. Review the sentence pattern by ppt 2. Do the exercises on the IWB 3. Teach the grammar on the handout 4. Do the exercises on the handout	Exercise book p20-21
8	10/18	1. Check the answers of the exercise book 2. Review the grammar on the handout	Handout
	10/20	Graduation Trip	
	10/21		
	10/22		

9	10/25	Pattern 2 (p.44-45) 1. Check the answers 2. Review the sentence pattern 3. Do the exercises 4. Introduce the website to do the exercises of relative clauses	Exercise book p22-26
	10/27	Warm-up (p.37) 1. Check the answers of exercise book 2. Teach the warm-up	Think of the topic of the presentation of the unit
	10/28	Dialog (p.38) 1. Discuss about the topic 2. Talk about the warm-up 3. Teach the new words 4. Teach the dialog	1. Write the vocabulary 2. Quiz next time
	10/29	Dialog, Theme Words, Reading (p.39-41, 46-47) 1. Quiz (vocabulary \ dictation) 2. Review dialog (p.38) 3. Teach the new words 4. Teach Dialog 5. Teach Theme Words 6. Teach new words 7. Teach Reading 8. Students practice talking the sentences on the Reading 9. Talk about the presentation	1. Write the vocabulary 2. Prepare the task 3. Quiz next time
10	11/1	Try it (p.48) 1. Quiz (vocabulary \ dictation) 2. Students share their letters 3. Teach the Read and Choose 4. Let students sit in groups and discuss about the presentation task	Workbook U4
	11/3	Task: How to reject a boy/girl's love confession 1. Presentation 2. Feedback	
	11/4	Workbook (p.26-33) 1. Check the answers 2. Listen to the listening practice of the workbook 3. Discuss about the topic	
	11/5	Unit 5: <i>This Is the Fair I Have Waited For!</i> Pattern 2 (p.56-57) 1. Check the test 2. Teach Pattern 2 3. Do the exercise	Exercise book p27
11	11/10	Warm-up (p.49) 1. Check the test 2. Review Sentence Pattern 1, 2 3. Teach Warm-up	1. Handout 2. Think of the topic of the

		4. Discuss about book fair	presentation of the unit 3. Quiz next time
	11/11	New Words (p.50-51) 1. Check the handout 2. Teach new words 3. Decide the topic	
	11/12	Dialog (p.50-51), Theme Words (p52-53), Reading (p.58-59) 1. Quiz (vocabulary) 2. Teach Dialog 3. Teach Theme words 4. Introduce book fair 5. Quiz (fill in the blanks of the Dialog) 6. Teach Reading	1. Write the vocabulary 2. Write book p55 3. Quiz next time
12	11/15	Try It (p.60) 1. Quiz (vocabulary) 2. Teach Try It 3. Check the answer of book p55	1. Exercise book U5 2. Workbook U5
	11/17	Workbook (p.34-41) 1. Check review test 2. Check exercise book 3. Listen to listening practice 4. Check work book	
	11/18	Mock Exam	
	11/19	Mock Exam	
		Unit 6: If We Cheat, We Will Never Learn! Pattern (p.66-67) 1. Check mock exam 2. Teach Pattern 3. Do exercises	Exercise book
13	11/22	Warm-up (p.61), Dialog (p.62-63) 1. Check exercise book 2. Teach Warm-up 3. Teach new words	1. Write the vocabulary 2. Quiz next time
	11/23	Task: Book Review 1. Presentation 2. Feedback	
	11/24	Dialog (p.62-63), Theme Words (p64-65) 1. Quiz (vocabulary) 2. Teach Dialog 3. Do exercises 4. Teach Theme Words 5. Check exercises	1. Write the vocabulary 2. Quiz next time
	11.25	Reading (p.68-69), Try It (p.70), Review 2 (p.71-72) 1. Teach new words	1. Exercise book U6

		2. Teach Reading 3. Teach Try It 4. Teach review 5. Check exercises	2. Workbook U6
	11/26	Workbook (p.42-49) 1. Check the answer of exercise book 2. Check work book 3. Listen to listening practice	
14	11/29	Task: Review U4~6 (Data Source)	
	12/1	Second Monthly Exam	
	12/2		
	12/3	Unit 7: I Know She Wants the Best for Me Pattern 1 (p.78-79) 1. Check the exam 2. Introduce unit 7 3. Group discussion about the task presentation 4. Teach Pattern 5. Do exercises	1. Exercise book p33-34 2. Handout
15	12/6	Pattern 1 (p.78-79) 1. Check homework 2. Review the pattern	
	12/8	Pattern 2 (p.80-81) 1. Check the test 2. Teach Pattern 2 3. Do exercise on the IWB	1. Handout 2. Book p81 3. Exercise book p34
	12/9	Warm-up (p.73), New Words (p.74-75) 1. Check the answers 2. Teach the Warm-up 3. Share their opinions about the warm-up 4. Teach new words	1. Write the vocabulary 2. Quiz next time
	12/10	Dialog (p.74-75), Theme Words (p.76-77), Reading (p.82-83) 1. Quiz (vocabulary) 2. Teach Dialog 3. Teach Theme Words 4. Teach new words 5. Teach Reading 6. Share opinions about arguing with parents	Write the vocabulary
16	12/13	Reading (p.82-83), Try It (p. 84) 1. Review Reading 2. Teach Try It 3. Ask students' ideas	1. Exercise book U7 2. Workbook U7
	12/15	Task: Issues about arguing with parents and how to solve the problems 1. Presentation 2. Feedback	
	12/16	Workbook (p.50-57)	

		<ol style="list-style-type: none"> 1. Check the answers 2. Listen to listening practice 	
	12/17	Unit 8: Tell Me What the Biggest Difference Is Pattern 1(p. 90) <ol style="list-style-type: none"> 1. Correct the answers of two tests 2. Teach Pattern 1 by ppt 3. Teach the handout 4. Do exercises 5. Teach Pattern 1 on the book 	Handout
17	12/20	Pattern 1, 2, 3 (p.90-93) <ol style="list-style-type: none"> 1. Correct handout 2. Review Pattern 1 3. Teach Pattern 2 4. Teach Pattern 3 5. Students do exercises on the IWB 	<ol style="list-style-type: none"> 1. Book p92-93 2. Exercise book p32-39
	12/22	Pattern 3 (p.92-93), New Words (p.86-87) <ol style="list-style-type: none"> 1. Check the test 2. Review Pattern 3 3. Do the exercises 4. Teach new words 	<ol style="list-style-type: none"> 1. Write the vocabulary 2. Quiz next time
	12/23	Mock Exam	
	12/24	Mock Exam Warm-up (p.85), Dialog (p.86-87) <ol style="list-style-type: none"> 1. Check the exam 2. Quiz (vocabulary) 3. Teach Dialog 4. Comprehension questions 5. Introduce fast food culture in the US 	Quiz next time
18	12/27	Theme Words (p.88-90) <ol style="list-style-type: none"> 1. Quiz (dictation) 2. Teach theme words 3. Watch video [Table Manners] 4. Share opinions 	<ol style="list-style-type: none"> 1. Write the vocabulary 2. Quiz next time
	12/29	Reading (p. 94-95) <ol style="list-style-type: none"> 1. Quiz (vocabulary) 2. Check mock exam and test 3. Teach new words 4. Teach Reading 	<ol style="list-style-type: none"> 1. Write the vocabulary 2. Quiz next time
	12/30	Reading (p.94-95), Try It (p.96) <ol style="list-style-type: none"> 1. Quiz (vocabulary, dictation) 2. Teach try it 3. Share the photos of summer vacation study tour 	<ol style="list-style-type: none"> 1. Exercise book U8 2. Workbook U8
	12/31	Workbook (p.58-65) <ol style="list-style-type: none"> 1. Check the answers 2. Listen to listening practice Task: Introduce a country and its characteristics <ol style="list-style-type: none"> 1. Presentation 2. Feedback 	

19	1/3	Unit 9: I Won't, Either. Pattern (p.102-103) 1. Teach grammar by ppt 2. Grammar games on the IWB 3. Teach pattern 4. Do exercises	1. Handout 2. Exercise book p.41-42
	1/5	1. Check two tests 2. Check homework	
	1/6	Dialog, New Words (p98-99) 1. Teach new words 2. Teach dialog	1. Write the vocabulary 2. Quiz next time
	1/7	Theme Words (p.100-101), Reading (p.104-105), Try It (p.106) 1. Teach new words 2. Teach theme words 3. Teach new words 4. Teach reading 5. Do exercises 6. Teach try it 7. decide the task topic of this unit	1. Exercise book U9 2. Workbook U9
20	1/10	Workbook (p.66-71), Review 3 (p.107) 1. Correct answers of the homework 2. Teach review 3 3. Do exercises and check the answers	Book p.108 Workbook (p.72-72)
	1/12	Workbook(p.72-72) 1. Correct answers 2. Check two tests	
	1/13	Test 1. Check answers 2. Do the questionnaire	
	1/14	Task: Zodiac Signs 1. Presentation 2. Feedback	
21	1/17	Task: Review U7~9 (Data Source)	
	1/19	Third Monthly Exam	
	1/20		

Appendix II
Sample Lesson Plan
First Cycle

Level: Junior High School 9th graders

Grammar focus:

1. Passive Sentence, Modal Auxiliary (may, can, must, should)
2. Tag Question
3. Past Participle and Present Participle as adjectives

Aim: to let students use the target language spontaneously to accomplish the task of reviewing three units before each monthly exam

Preparation:

- Get familiar with the IWB and software from the publisher
- Get familiar with the content from the book
- Choose eight people as a group leader.
- Divide and assign unit for each group.

Pre-task warmer:

- Briefly describe the task
- Introduce and manipulate IWB to students

Task:

(a) Planning

- Students form a group of 4 people include the leader the teacher assigned
- Each group choose a unit to review
- They have to decide how to and in what kind of form they are going to review the unit with IWB in 15 minutes

(b) Executing task

- Students have to make a brief lesson plan about what are they going to teach e.g., PPT, webpage.
- Before the report class, students in the responsible group need to have a meeting with the teacher for one hour to make sure the procedure and solve some problems

(c) Reporting

- Students in each group use the target language cooperated with IWB to do the unit review
- Other students may ask questions about the unit and have peer assessment

Post task:

- Students can have suggestions about the demonstration to the group
- Other students may be invited to the front to have different demonstrations if they have some better idea

