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Evaluation of Ability Grouping and Mixed-Ability Grouping Practices in Junior High English Class

Yuh-Show Cheng[1] Chin-Ying Shih[2]

Abstract

This paper reports a case study that aimed to evaluate two grouping practices—ability grouping and mixed-ability grouping practices—carried out with the same group of students for the subject of English at one junior high school in Taipei. To offer a more comprehensive understanding of the effects of the two grouping practices, the study adopted both quantitative and qualitative approaches to seeking reports and opinions from all major groups of stakeholders, including students, parents, teachers, and school administrators. Those students who experienced ability-grouped English classes at seventh grade and ungrouped classes at eighth grade as well as their parents were first surveyed with two different sets of questionnaires and then interviewed. Interviews were also conducted with the English teachers, homeroom teachers, and administrators involved. The study fails to provide strong evidence to prove which grouping practice is unequivocally good for the junior high English class, where wide discrepancy in students' English proficiency has posed a big challenge to teachers. It was found that the two grouping practices each had advantages and disadvantages. Ability grouping appeared to favor high performing students whereas mixed-ability grouping, low performing students. Correspondingly, high performing students tended to prefer ability grouping but low performing students, mixed-ability grouping. Nevertheless, the number of students that opted for mixed-ability grouping was greater than that showing preference for ability-grouping. The opposite was true for parents: There were more parents supporting

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ability grouping. As students and parents differed in their acceptance of the two grouping practices, school faculty members were divided in their preferences for the two grouping practices. Based on the findings of the case study, some suggestions and principles for grouping plans at the junior high school are offered, which take into consideration different needs of high and low performing students and equity of education.

Key words: ability grouping, case study, junior high English class, mixed-ability grouping

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國中英語能力分班與常態分班教學之個案研究

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摘要

本論文報導一個案研究，其目的主要在評估台北市某國中在英語課上實施能力分班與常態分班的效益。該國中在二〇〇二年對七年級生實施英語能力分組教學，但在該批學生升上八年級時（即二〇〇三年），取消了英語能力分組教學，改採常態分班方式教授英語，因而該批學生在國中階段歷經了兩種分班方式。為求對兩種分班方式對英語教與學的效用獲致較廣泛且深入的瞭解，本研究採取質、量並重的方式蒐集資料，對該國中曾經歷兩種分班方式的全體學生及其家長進行問卷調查和訪談；另外也訪談了相關的英語教師、導師和行政人員。研究發現兩種分班方式在英語的教與學上，各有利弊；並無強有力的證據得以支持哪種分班方式一定比較好。但大抵而言，英語能力分班對高成就學生之學習較為有利，而常態分班對低成就學生較有利。高成就的學生也比低成就的學生傾向支持能力分組教學；但整體而言，較多學生喜歡常態分班。相反的，較多家長偏向支持英語能力分組教學。英語教師、導師和行政人員對兩種分班方式的看法則相當分歧。為兼顧學生不同需求及顧及教育公平性，本論文依據研究發現在文末對國中英語課分班方式提出一些建議和處理原則。

關鍵詞：能力分班、個案研究、國中英語、常態分班

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Introduction

Wide discrepancy in students' English proficiency level has become one of the major issues in Taiwan's English education at the elementary and junior high school levels (Chang, Chou, Chen, Yeh, Lin, & Hsu, 2003; Chen, Y. H., 2004; Chen, Y. P., 2004; Chiang, 2000; Lin, 2003; Wu-Yen, 2006). Such discrepancy makes it a great challenge for teachers to teach a mixed-ability English class, where low achievers often reveal inferiority and easily give up learning whereas high achievers often show arrogant attitudes and take little interest in classroom activities (Chen, Y. P., 2004; Huang, 2002; Reid, Clunies-Ross, Goacher, & Vile, 1981). Ability grouping is believed to be one of the solutions to this problem (Chen, 2002; Chiang, 2000; Wu-Yen, 2006). In fact, up to 44.8% of junior high school English teachers surveyed in Y. H. Chen's (2004) study called for "implementing ability grouping for English courses" in Taiwan (p. 71). By placing students into different ability levels, it is believed that teachers can provide students with materials and instruction appropriate to their levels and thereby improve students' learning (Chien, Ching, & Kao, 2002; Hereford, 1993; Yu, 1994).

However, studies on the effects of ability grouping have yielded mixed results (Nicholson, 1998). On the one hand, ability grouping was found to benefit students' learning. Research has shown that ability grouping could have a positive impact on students' self-concept and their attitudes towards the subjects when grouping was used only for specific subjects, that is, when students were assigned to heterogeneous homeroom classes for most of the day but were re-sorted into ability grouped classes for one or more subjects (Goldberg, Passow, Justman, 1966; Hsiao, 2006; Ireson, Hallam, Plewis, 2001; Kulik, 1981, 1992; Slavin, 1987). This grouping plan helped students see the advantage of instruction adapted to their achievement levels (Hallam, Ireson, Mortimore, & Davies, 2000; Lou, 1986; Kulik, 1981; Su & Lin, 2003; Yu, 1994). Moreover,

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it gave low achievers in the heterogeneous class a chance to take a leadership role in a grouped class that challenged their ability appropriately (Kelly, 1969) and might thus reduce their pressure of learning (Hsiao, 2006).

Besides positive affective effects, ability grouping has also been found to enhance students' achievement. For example, Slavin's (1986, cited in Hollifield, 1987) comprehensive review of research on different types of ability grouping in American elementary schools indicated that ability grouping for reading or mathematics improved students' achievement. Likewise, after a review of 52 studies on ability grouping carried out in American secondary schools, Kulik and Kulik (1982) concluded that ability grouping contributed to a small, yet significant, gain in students' achievement on examinations. Similar findings were reported in studies of ability grouping at college level in Taiwan. For example, Chien, Ching, and Kao (2002) found that students in ability-grouped freshman English classes made greater progress in their performance on TOEFL tests than those in the ungrouped classes. According to Luo (2005), except those grouped in the advanced level, students in the basic and intermediate levels exhibited improvement in English proficiency, as determined by their performance on two proficiency tests conducted at the beginning and the end of the one-year freshman English program.

On the other hand, evidence has accumulated that demonstrates negative effects of ability grouping on learning, be it in the domains of students' affect or academic achievement. In terms of negative affective effects, ability grouping was reported to cause problems such as anxiety about English classes (Lin, 2004), stigma attachment to low-ability groups (Burroughs & Tezer, 1968; Chen, 2005; Chou & Luo, 2003; Wang, 1998), impaired self-concept of low-level students (Esposito, 1973; Lu, 1991; Wilson & Schmits, 1978), adverse peer culture in low-ability groups that discourages learning and promotes rebellious and mischievous behavior (Chiang, 2000; Eder, 1981; French & Rothman, 1990; Burroughs & Tezer, 1968), artificially inflated self-esteem of high-level students (Chiang, 2000; Esposito, 1973; Wilson & Schmits, 1978), and negative big-fish-little-pond effect on poor performers in high-ability groups (Chiang, 2000; Ireson,

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Hallam, & Plewis, 2001).

With regard to achievement, while Slavin's (1990) review of 29 studies at secondary schools in the United States and Chien's (1987) study at a college freshman English program in Taiwan revealed essentially no effect of ability grouping on achievement, other researchers suggested that ability grouping favored high-level groups in achievement but did not help or even retarded academic progress of students in low- or intermediate-level groups (Bryan & Findley, 1970; French & Rothman; 1990; Gamoran & Berends, 1987; Kulik & Kulik, 1982; Oakes, 1985; however, cf. Luo, 2005). Obviously, previous research did not demonstrate any conclusive evidence regarding the effects of ability grouping on students' learning. Neither have the effects of ability grouping been systematically evaluated against those of mixed-ability grouping with the same group of students. The practice of ability grouping remains a controversial issue that requires continued scrutiny of its effects.

The Study

The Context

To address the problem of heterogeneity in students' English proficiency that could be exacerbated by the official implementation of English education at the elementary school level, the school administrators and English teachers of Sunny Junior High School[1] in Taipei City decided to implement ability grouping in the seventh-grade English class in the school year of 2002. The students involved were among the first groups

1 To respect the school's right to privacy, a pseudonym, Sunny Junior High School, is used to refer to the school under investigation.

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of students in Taiwan that received English education under the grade 1-9 curriculum reform launched in the school year of 2001, when they were sixth graders. That is, before they entered junior high school, those students had received one year's formal education in English. However, because many of those students were arranged by their parents to learn English outside school, there were great variations in years of English learning among the students. According to their self-report, more than 76% of the students had learned English more than one year before they entered junior high school, with 25% of them having learned English for more than four years and 51% of them, for two to three years.

For the convenience of scheduling classes, nine homeroom classes were first divided into three sections of classes. Classes of the same section shared the same course schedule. Students were assigned to each class in such a way that the three sections consisted of students of similar intellectual ability, as determined by a standardized IQ test. Each section was further divided into three classes (one class of Group A and two classes of Group B) according to students' performance on an English placement test constructed by two English teachers of Sunny Junior High School.[2] Without considering consequences of naming, the top one-third students in each section were placed in Group A. The rest of the students in each section were placed into B1 and B2, supposedly two classes of equal English proficiency. Although students were placed into two different ability levels (i.e., A and B), they all used the same set of English textbooks and took the same midterm and final examination questions for the sake of fairness in learning and grading. However, teachers were given the freedom to design their lessons according to the needs of different classes. Such policy made it possible to re-sort students in the second semester on a seemingly fair basis, i.e., average scores on the midterm and final English examinations of the first semester taken by all students. Original

2 The two teachers tried to ensure content validity of the placement test by consulting the textbooks used by the two elementary schools in their school district when constructing the test items. However, no formal report on the reliability and validity of the test was given.

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Group B students that advanced to the top one-third in each section were transferred from Group B to Group A, and vice versa. Another equity-minded policy concerns teacher assignment. To avoid the problem of labeling English teachers as "Group A teachers" or "Group B teachers," with only one exception, different groups of classes were assigned evenly to the four English teachers involved. All of them were certified English teachers with more than 7 years' teaching experience.

One year later, a meeting was held to decide whether to continue the ability grouping plan. Six out of the nine English teachers at Sunny Junior High School voted against continuing the ability grouping system based on the four English teachers' reflections on ability grouping. [3]Therefore, in the next school year, the same group of students had their eighth-grade English in ungrouped homeroom classes. That is to say, this group of students experienced two kinds of grouping practices—ability grouping and mixed-ability grouping—in English class during their junior high school years. The case of Sunny Junior High School offers a rare chance for educators to evaluate the effects of ability grouping practice against mixed-ability grouping practice.

Research Questions

The present study aimed to evaluate the two grouping practices carried out at Sunny Junior High School in the school years of 2002 and 2003, in the hope of offering education policy makers, school administrators, and teachers implications for decision

3 Three of these four teacher were against ability grouping at the meeting, pointing out several problems of the practice, including arrogant attitudes of Group A students, students' late arrivals caused by moving from one classroom to another between classes, diminished time to be with and thus difficulty in understanding those homeroom students assigned to classes taught by other English teachers, increased lesson preparation load caused by the policy that each English teacher was assigned to teach students of both levels (i.e., Group A and Group B). However, it is interesting to find that when the three teachers were later interviewed in this study, two of them said that they would have voted for ability grouping if they did not have to consider management of their homeroom class.

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making in choosing ability grouping plans. To offer a more comprehensive understanding of the effects of the two grouping practices, this study sought reports and opinions from all major groups of stakeholders, including students, parents, teachers, and school administrators. Specific questions addressed here include:

1. How did English teachers teach in ability-grouped and ungrouped classes respectively?
2. How did students, parents, teachers, and school administrators feel about learning and teaching English in ability-grouped classes, as opposed to in ungrouped classes?
3. What difficulties and problems did students, teachers, and administrators encounter under each of the two grouping practices?

Methodology

Data Collection Procedures

This study adopted two data collection procedures: questionnaires and interviews. First, a total of 263 (145 male and 118 female) ninth graders at Sunny Junior High School who experienced both ability-grouped English classes at seventh grade and ungrouped classes at eighth grade as well as their parents were surveyed, using two different sets of questionnaires. A questionnaire was administered to students in class while their parents were given a questionnaire to fill out at home. Among the 263 parents surveyed, 170 returned their questionnaires, resulting in a response rate of 65%. Besides, interviews were conducted with the following five groups of stakeholders: (1) three of the four English teachers involved in both grouping practices;[4] (2) four homeroom teachers that experienced both kinds of grouping practices and did not overlap with English teachers; (3) the administrators in charge of ability grouping, including the director of students' academic affairs, the chief of curriculum section, and the chief of registry section; (4) forty students randomly selected according to the ratio of students in Group A,

4 The only exception was, in fact, one of the researchers of this study.

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Group B, and Transfer Group (approximately 2:5:3); [5]and (5) ten parents randomly chos-en from those that expressed willingness to participate in a phone interview after completing the questionnaire.

Instruments

Students' Questionnaire. The questionnaire for students consisted of two parts. Part one inquired about students' background information. Part two comprised 48 statements related to students' perceptions of and attitudes towards learning English in ability-grouped and ungrouped classes. Specifically, Items 1 to 47 were constructed to explore the effects of the two grouping practices in six areas that have been frequently discussed in the literature on ability grouping (e.g., Burroughs & Tezer, 1968; French & Rothman, 1990; Goldberg, Passow, & Justman, 1966; Lou, 1986; Yu, 1994). The six areas were (1) stigmatization; (2) students' affective states; (3) teacher's instruction and attitudes; (4) students' learning outcomes and attitudes; (5) classroom atmosphere and interaction; and (6) students' satisfaction with grouping plans. Students' responses to Items 1 to 47 were scored on a four-point Likert scale (4 = strongly agree; 3 = agree; 2 = disagree; 1 = strongly disagree). Item 48 asked students to choose their preferred grouping practices from three options: "grouped class," "ungrouped homeroom class," and "not sure."

Parents' Questionnaire. The questionnaire for parents also consisted of two parts. Part one dealt with their children's background information. Part two contained three statements that tapped parents' perceptions about the effects of ability grouping on stigmatization (Item 1), enhancing English learning (Item 2), and inducing negative affect (such as sense of inferiority or arrogance) (Item 3). Parents' responses to the three statements were also scored on a four-point Likert scale (4 = strongly agree; 3 = agree; 2 = disagree; 1 = strongly disagree). Item 4 asked parents to indicate their preferred gro-

5 Consequently, 8 of the 40 student interviewees were from Group A, 20 from Group B, and 12 from Transfer Group (i.e., those either transferred from Group A to Group B or from Group B to Group A).

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uping practice for their children: "grouped classes," "ungrouped homeroom classes," or "not sure." [6]

Interview Questions. To obtain a more in-depth understanding of the effects of the two grouping practices, five sets of questions were constructed for interviews with students, parents, English teachers, homeroom teachers, and school administrators. The interviews with students started with questions about their English learning experiences and then proceeded to questions pertaining to (1) their feelings about being assigned to a particular group in the first semester of the seventh grade; (2) their observations about classroom activities and peer interactions under the two grouping practices; (3) their opinions about the effects of the two grouping practices on their English learning; and (4) whenever applicable, their feelings about being transferred to another group in the second semester of the seventh grade and their observations about the classroom activities in the two ability-grouped classes. Interviews with parents focused on parents' observations of their children's learning and achievement under the two grouping practices. Parents' opinions about ability grouping in junior high school were also sought.

Interviews with English teachers, homeroom teachers, and administrators were aimed to add information regarding the effects of the two grouping practices from instructors' and administrators' perspectives. Accordingly, in addition to questions about teaching experiences, the English teachers were asked to talk about (1) their observations about students' performance and reactions in English classes under the two grouping plans; (2) their own instructional practices and decisions under the two grouping plans; (3) the expectations and goals they set for students in English classes under the two grouping plans; (4) their thoughts about the effects of ability grouping in enhancing English learning; (5) the problems and difficulties in English instruction they encountered under the two grouping plans; and (6) their preference for future grouping plan.

6 Due to space limitation, the questionnaire was not provided in this paper. Readers interested in the questionnaire may request one copy of the questionnaire from either of the two authors.

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Similarly, the homeroom teachers were interviewed about their observations of their homeroom students' reactions towards ability grouping in seventh-grade English class and towards the abolition of ability grouping in eighth-grade English class. They were also asked to recall parents' responses to the two grouping practices, if any. At last, the homeroom teachers' personal preference for grouping practices was explored. As to interviews with the administrators in charge of ability grouping, the focus was on their knowledge about parents' and teachers' general responses to the use and abolition of ability grouping as well as the administrative difficulties they encountered under the two grouping practices. Their personal preference for the two grouping practices was also asked.

Data Analysis Procedures

The questionnaire data were analyzed using SPSS. After computing descriptive statistics such as means and standard deviations, inferential statistic procedures were employed to analyze the data. For those pairs of questions inquiring about students' perceptions about the two grouping practices (i.e., grouping vs. ungrouping), two-way ANOVA repeated measures were used to examine whether any interaction effect existed between students' group membership (i.e., A, B, or Transfer), a between-subject factor, and the two grouping practices, a within-subject factor. Whenever necessary, follow-up one-way ANOVA or ANOVA repeated measures was conducted to examine simple main effects. A total of 19 pairs of questions underwent such a procedure.

Students' responses to other questions that addressed each of the two grouping practices independently were analyzed by one-way ANOVA to determine the group membership effect (group effect hereafter) on students' responses. When a significant group effect was found, post hoc comparisons were conducted to detect where the significant difference lay. Chi-square test was employed to examine the relationship between students' choice of preferred grouping practices and background variables such as group membership, gender, and years of English learning.

In addition to descriptive statistics, parents' responses to Items 1, 2 and 3 on the

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questionnaire, as described above, were analyzed using one-way ANOVA to see if the group their children was assigned to (A, B, or Transfer) made a significant difference in their perceptions of the two grouping practices. Chi-square test was conducted to examine the relationship between parents' preferences for grouping practices (item 4) and such variables as their children's group membership, gender, and years of English learning.

All of the interviews were recorded and transcribed for content analysis.

Results

Questionnaire Data

Students' Questionnaires

Of the 19 analyses of interaction effects, four significant interaction effects were found between students' groups and their responses to grouped and ungrouped classes. The first significant interaction effect ($F_{2,260} = 5.786, p = .003$) was found in students' perception of the interest level of the two English classes (see Figure 1). Group A considered the grouped class ($M = 3.08$) more interesting than the ungrouped class ($M = 2.80$) and the difference reached significance level ($F_{1,260} = 5.453, p = .023$). In contrast, Transfer and Group B perceived the ungrouped class ($M_{Transfer} = 2.91$ *and* $M_B = 2.79$) more interesting than the grouped class ($M_{Transfer} = 2.77$ *and* $M_B = 2.59$) although the difference reached significance level only for Group B ($F_{1,260} = 5.040, p = .026$). Besides, in grouped class there was a significant group difference in perceived fun of English learning ($F_{2,260} = 7.935, p = .000$). Group A ($M = 3.08$) felt significantly more fun learning in grouped English class than Group B ($M = 2.59$).

Another significant interaction effect ($F_{2,260} = 5.618, p = .004$) was found in students'

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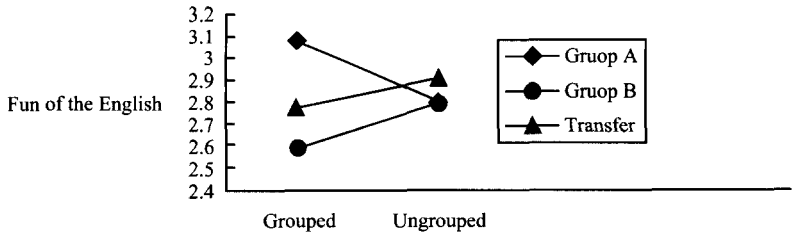

Figure 1 Interaction Between Students' Groups and Grouping Practices in Fun of the English Class

perception about their classmates' concentration level in class (see Figure 2). Although Transfer did not perceive much difference in concentration level between their grouped ($M = 2.57$) and ungrouped ($M = 2.54$) classmates, Group A perceived that their peers in Group A class ($M = 2.71$) concentrated more than their ungrouped homeroom peers ($M = 2.39$) and the difference reached significance level ($F_{1,260} = 10.174, p = .002$). In contrast, Group B perceived that their ungrouped homeroom peers ($M = 2.51$) concentrated more than their Group B peers ($M = 2.40$) although the difference did not reach significance level. In fact, in grouped class Group B rated their classmates less concentrated than Group A did to their classmates and the difference was significant ($F_{2,260} = 4.739, p = .010$). However, the opposite was true in ungrouped class: Group A rated their classmates less concentrated than Group B did to their classmates. But the difference was not significant.

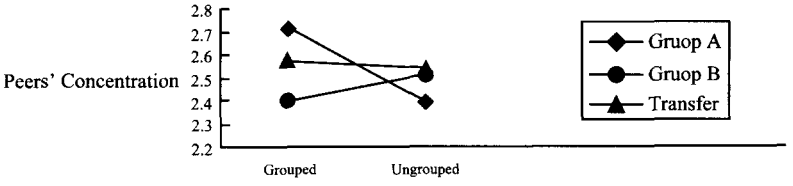

Figure 2 Interaction Between Students' Groups and Grouping Practices in Peers' Concentration Level in Class

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There was also a significant interaction effect ($F_{2,260} = 4.095, p = .018$) in students' perception about the likelihood of finding role models in class (see Figure 3). Although Transfer reported that the likelihood of finding role models was the same under the two learning situations ($M = 2.07$), Group B reported that it was more difficult to find role models in grouped class ($M = 2.15$) than in ungrouped class ($M = 1.88$) whereas Group A reported that it was more difficult to find role models in ungrouped class ($M = 1.92$) than in the grouped class ($M = 1.85$). But only for Group B did the differences in responses to the two grouping practices reach significance level ($F_{1,260} = 11.659, p = .001$). Note that there was also a significant group effect on perceived accessibility to role models in grouped class ($F_{2,260} = 4.620, p = .011$). Specifically, Group B ($M = 2.15$) reported a significantly higher degree of difficulty finding role models in grouped class than Group A ($M = 1.92$).

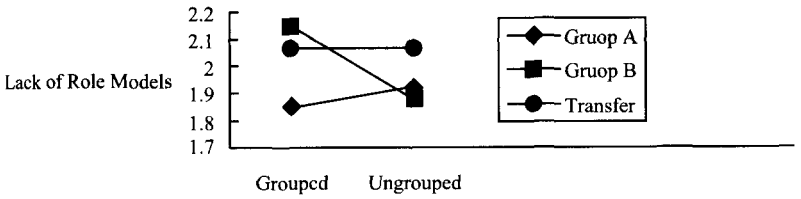

Figure 3　Interaction Between Students' Groups and Grouping Practices in Lack of Role Models in Class

Finally, a significant interaction effect ($F_{2,260} = 4.890, p = .008$) was found in students' perception about accessibility to familiar peers for consultation (see Figure 4). Although all groups tended to agree that it was easier to find familiar peers in ungrouped class than in ability-grouped class, Group B perceived an especially sharp difference in accessibility to familiar peers between grouped and ungrouped classes. In fact, Group B ($F_{1,260} = 32.404, p = .000$) and Transfer ($F_{1,260} = 6.564, p = .013$) responded significantly differently to the two grouping practices. Both groups reported a lower degree of accessibility to familiar peers to consult in grouped class ($M_B = 2.68, M_{Transfer} = 2.89$)

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than in ungrouped class ($M_B = 3.18, M_{Transfer} = 3.10$). What is more, there was significant group difference in responses to grouped class ($F_{2,260} = 5.787, p = .003$). Specifically, Group B ($M = 2.68$) agreed significantly less than Group A ($M = 3.05$) on easy access to familiar peers in grouped class. However, Group B ($M = 3.18$) agreed slightly more than Group A ($M = 3.17$) and Transfer ($M = 3.10$) that they had easy access to familiar peers in ungrouped homeroom class although the difference was not signifi-

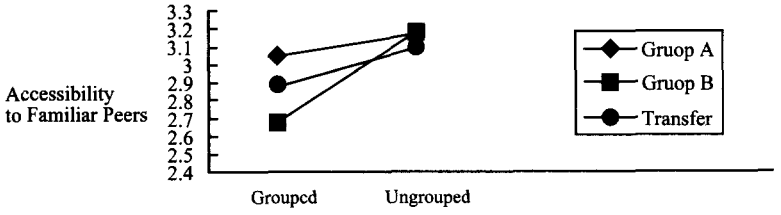

Figure 4 Interaction Between Students' Groups and Grouping Practices in Accessibility to Familiar Peers for Consultation in Classes

cant.

In addition to the above four significant interaction effects, a total of 14 significant effects of group membership (i.e., A, B, or Transfer) and/or grouping practice were found. With regard to group effects, significant differences were observed among students of different group membership in (1) perception of Group A's superiority under the ability grouping plan ($F_{2,260} = 6.523, p = .002$); (2) learning confidence in the grouped class ($F_{2,260} = 4.233, p = .0.16$); (3) perception of teachers' low expectations under both conditions: ability grouping ($F_{2,260} = 6.407, p = .002$) and mixed-ability grouping ($F_{2,260} = 5.930, p = .003$); (4) learning progress under both conditions: ability grouping ($F_{2,260} = 6.189, p = .002$) and mixed-ability grouping ($F_{2,260} = 4.050, p = .019$); (5) understanding of instruction under both conditions: ability grouping ($F_{2,260} = 7.822, p = .001$) and mixed-ability grouping ($F_{2,260} = 4.336, p = .014$); and (6) attitudes toward the practice ($F_{2,260} = 7.381, p = .001$) and abolition ($F_{2,260} = 10.665, p = .000$) of ability grouping.

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Specifically, Group B (M = 2.65) and Transfer (M = 2.64) agreed significantly more highly than Group A (M = 2.19) that ability grouping made Group A students exhibit a sense of superiority. Besides, Group B ($M_{grouped}$ = 2.17, $M_{ungrouped}$ = 2.19) and Transfer ($M_{grouped}$ = 2.17, $M_{ungrouped}$ = 2.21) felt more strongly than Group A ($M_{grouped}$ = 1.80, $M_{ungrouped}$ = 1.88) that their teachers had low expectations about them, either in the ability-grouped class or ungrouped class. Group B (M = 2.60) also reported less confidence in learning than Group A (M = 2.94) in the grouped class. On the other hand, Group A reported significantly better understanding of instruction than Group B in both ability-grouped (M_A = 3.22 vs M_B = 2.75) and ungrouped classes (M_A = 3.05 vs M_B = 2.71). Group A (M = 2.68) also felt more strongly than Group B (M = 2.27) that they made progress in ability-grouped class while Transfer (M = 2.60) believed more strongly than Group B (M = 2.34) that they made progress in ungrouped class. Both Group A (M = 2.80) and Transfer (M = 2.67) were happier than Group B (M = 2.30) about the practice of ability grouping in the seventh-grade English class. In contrast, Group B (M = 3.04) were happier than Group A (M = 2.41) and Transfer (M = 2.70) about the abolition of ability grouping in the eighth-grade English class.

As to grouping effects, significant differences between the two grouping practices were found in (1) Group B's perceptions of stigmatization ($F_{1,260}$ = 9.083, p = .002); (2) Group B's ($F_{1,260}$ = 6.556, p = .012) and Transfer's ($F_{1,260}$ = 6.149, p = .016) perceptions about their peers' willingness to help; (3) Group A's self-perception about concentration ($F_{1,260}$ = 7.092, p = .010); and (4) Group A's feeling of pressure ($F_{1,260}$ = 10.026, p = .002). To be specific, Group B felt the effect of stigmatization was much stronger in grouped English class (M = 2.43) than in ungrouped class (M = 2.17). Group B and Transfer both perceived that their grouped peers (M_B = 2.66, $M_{Transfer}$ = 2.63) were less willing to help each other learn English than their ungrouped homeroom peers (M_B = 2.91, $M_{Transfer}$ = 2.93). More interestingly, Group A reported to concentrate significantly better in grouped class (M = 2.83) than in ungrouped class (M = 2.53) although they felt more pressure of public performance in grouped class (M = 2.63) than in ungrouped class (M = 2.29).

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Both group membership and grouping practices made significant differences in two aspects. Firstly, group ($F_{2,260} = 4.681, p = .010$) and grouping ($F_{1,260} = 5.748, p = .017$) both had significant effects on students' perception about the flow of classroom activities. The significant group effect was observed in ability grouping practice ($F_{2,260} = 4.116, p = .017$), with Transfer ($M = 2.97$) agreeing more strongly than Group B ($M = 2.64$) that activities in grouped class went smoothly. The grouping effect was found in Group A's perception of classroom activities ($F_{2,260} = 4.895, p = .031$). They perceived that classroom activities went significantly more smoothly in grouped class ($M = 2.75$) than in ungrouped class ($M = 2.49$). A second significant effect of group ($F_{2,260} = 3.621, p = .028$) and grouping ($F_{1,260} = 27.329, p = .000$) was found in students' perception about accessibility to capable peers for consultation. The significant group effect was again found in ability grouping practice ($F_{2,260} = 5.265, p = .006$), with Group A ($M = 2.97$) agreeing more highly than Group B ($M = 2.61$) that it was easy to find capable peers to consult in grouped class. The significant grouping effect was observed in all three groups of students: Group A ($F_{1,260} = 5.538, p = .022$), Group B ($F_{1,260} = 26.073, p = .000$), and Transfer ($F_{1,260} = 7.541, p = .008$). The three groups unanimously reported greater accessibility to capable peers for consultation in ungrouped class ($M_A = 3.17$, $M_B = 3.10$, $M_{Transfer} = 3.09$) than in grouped class ($M_A = 2.97, M_B = 2.61, M_{Transfer} = 2.80$).

Finally, when asked to choose their preferred grouping practices, nearly half (49.8%) of the students chose ungrouped class; only one quarter (25.1%) of them chose grouped class (see Table 1). Chi-square tests revealed that students' choice was significantly related to their group membership ($X^2 = 21.634, p = .000$), but not to students' gender, years of English learning, or experience with ability grouping at elementary school. A posteriori comparisons indicated a significant difference between Group A and Group B. More Group A students than Group B students preferred grouped English class, whereas more Group B than Group A students preferred ungrouped class.

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Table 1　Frequencies of Students' Choice of Preferred Grouping Practice

		Grouped		Ungrouped		Not sure	
		n	%	*n*	%	*n*	%
Students' group membership	Group A (n = 59)	25	42.4	18	30.5	16	27.1
	Group B (n = 134)	26	19.4	82	61.2	26	19.4
	Transfer (n = 70)	15	21.4	31	44.3	24	34.3
Gender	Boy (n = 145)	34	23.4	75	51.7	36	24.8
	Girl (n = 118)	32	27.1	56	47.5	30	25.4
Years of English learning before junior high school	1 year (n = 64)	14	21.9	36	56.3	14	21.9
	2 to 3 years (n = 134)	27	20.1	72	53.7	35	26.1
	4 years or more (n = 65)	25	38.5	23	35.4	17	26.2
Ability grouping in elementary English class	Yes (n = 77)	19	24.7	42	54.5	16	20.8
	No (n = 186)	47	25.3	89	47.8	50	26.9
Total (N = 263)		66	25.1	131	49.8	66	25.1

Parents' Questionnaire

Regarding parents' responses to ability grouping, significant differences were found among parents of different student groups (A, B, or Transfer) in responses to (1) benefit of ability grouping in English learning ($F_{2,167}$ = 11.973, P = .000) and (2) negative effects of ability grouping on students' affect ($F_{2,167}$ = 7.429, P = .001). Parents of Group A (M = 3.27, n = 45) and Transfer (M = 3.21, n = 47) agreed significantly more strongly than parents of Group B (M = 2.78, n = 78) that ability grouping in English classes met their children's needs and benefited their English learning. However, parents of Group B (M = 2.47, n = 78) agreed significantly more strongly than parents of Group A (M = 2.00, n = 45) that ability grouping caused negative affective effects on students, such as a sense of inferiority and arrogance.

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When asked to indicate their preference for grouping practices, more than half of the parents opted for ability grouping and 30% of them favored mixed-ability grouping (see Table 2). This result was in sheer contrast with the finding obtained from students, which showed that 50% of the students preferred mixed-ability grouping whereas 25% of them favored ability grouping.

Chi-square tests indicated that parents' choice was significantly related to their children's group membership ($X^2 = 42.969, p = .000$) and years of English learning ($X^2 = 25.827, p = .000$), but not to their children's gender or experience with ability grouping in elementary school. A posteriori comparisons revealed that significantly more Group A and Transfer parents showed preference for ability grouping than Group B parents. Besides, in comparison with the parents of students that studied English for only one year before entering junior high school, a significantly higher percentage of parents whose children had learned English for more than two years favored ability grouping. In contrast, significantly more parents of Group B preferred ungrouped class than parents of Group A and Transfer. So did the parents whose children had studied English for only one year prior to junior high school, when compared with those parents whose children had learned English for more than two years.

Interview Data

Data gathered through interviews with students, parents, teachers, and administrators were analyzed to shed further light into the effects of the two grouping practices. What follows are major findings on how the two grouping practices influenced teachers' instruction, students' learning, and administrative work.

Grouping Practices and Instruction

The interview data showed that English teachers' instructional plans and teaching strategies varied with the two grouping practices and different problems ensued.

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Table 2　Frequencies of Parents' Choice of Preferred Grouping Practice

		Grouped		Ungrouped		Not sure	
		n	%	*n*	%	*n*	%
Students' group membership	Group A ($n = 45$)	38	84.4	4	8.9	3	6.7
	Group B ($n = 78$)	24	30.8	40	51.3	14	17.9
	Transfer ($n = 47$)	35	74.5	7	14.9	5	10.6
Gender	Boy ($n = 79$)	48	60.8	19	24.1	12	15.2
	Girl ($n = 91$)	49	53.8	32	35.2	10	11.0
Years of English learning before junior high school	1 year ($n = 36$)	8	22.2	21	58.3	7	19.4
	2 to 3 years ($n = 95$)	60	63.2	25	26.3	10	10.5
	4 years or more ($n = 39$)	29	74.4	5	12.8	5	12.8
Ability grouping in elementary English class	Yes ($n = 58$)	35	60.3	19	32.8	4	6.9
	No ($n = 112$)	62	55.4	32	28.6	18	16.1
Total ($N = 170$)		97	57.1	51	30.0	22	12.9

Ability grouping practice. Both groups of student and teacher interviewees reported that teaching pace in Group A and Group B classes differed when ability grouping was implemented. The teaching pace was usually fast in Group A but slow in Group B, so that Group A students were allowed more class time to go beyond the textbook whereas Group B students could have sufficient practice on the basics in the textbook. Accordingly, instructional approaches and arrangements of activities differed with groups. In Group A, students were given more supplementary materials to enrich their learning. Besides, more innovative, communicative activities were designed for Group A, where students were expected to apply what they learned about English to communication (e.g., doing role plays and oral presentations in English). In Group B, the teachers spent most of their time lecturing, doing mechanical drills, and reviewing the lessons. Students were merely expected to master the basics. In the words of those that had tran-

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sferred from one group to another, lessons in Group B were more boring and repetitive than those in Group A.

One major problem of teaching in ability grouping plan came with the need for English teachers to adjust instruction according to students' ability levels. Because each teacher was assigned to teach both levels (Group A and Group B) for the sake of avoiding stigmatizing teachers, the workload of each teacher increased tremendously. Without collaborating with each other in lesson planning, each individual teacher had to prepare two instructional plans for each lesson. Another problem was concerned with class management. To those teachers that worked as an English subject and homeroom teacher at the same time, they felt troubled that they could teach English to only a part of their homeroom students (either in Group A or Group B) when students were divided into two levels. This arrangement made it difficult for them to know the other part of students equally well and caused problems in managing their respective homeroom class. The same issue was also raised by one of the four homeroom teachers that did not teach English. The homeroom teacher considered it easier to manage class affairs when students learned in ungrouped homeroom class, such as reminding students of the deadlines of English assignments and collecting homework.

Mixed-ability grouping practice. When mixed-ability grouping was practiced, the English teachers reported to teach in a way more like what they did in Group B class. They focused more of their attention on basic pattern practices and drills, considering that two-thirds of the students in the eighth-grade ungrouped class came from previous Group B classes. To meet advanced learners' needs, the teachers sometimes offered more challenging materials or assignments for high-ability students to complete by themselves or added more challenging questions on test papers for more advanced learners to answer. However, not all of the high-ability students took the supplementary materials and assignments seriously.

Generally speaking, the teachers tried to fulfill the average needs of all students in the mixed-ability (ungrouped) class. This instructional choice had difficulties meeting

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the needs of those students at either the high-ability or the low-ability ends. Previous Group A students generally felt the learning tasks in the ungrouped class less challenging and thus less motivating than those in the ability-grouped class. One previous Group A student commented:

> Group A teacher spoke more English. In ungrouped class, the teacher spoke more Chinese, so it was very easy to understand ……In Group A, the outside readings were more difficult for me, whereas in ungrouped class I only needed to study the textbooks, which were easier for me to learn. Therefore, I was not as hard-working in the ungrouped class as in Group A. (SA3)

In contrast, previous Group B students felt the learning tasks in the ungrouped class more difficult than those in the grouped class. What is even worse, some low achievers felt ignored in ungrouped English class because they felt their teachers did not consider their needs. One student complained:

> In ungrouped English class, the teacher cared for those advanced or intermediate learners more than us, low achievers. She might think that most of the class already learned this part, and she skipped it and moved on. We were not able to keep up with others. To some extent I felt the teacher in the ungrouped class did not care about me. (SB17)

Grouping Practices and Student Learning

According to the interviews, each of the two grouping practices had both positive and negative effects on students' learning.

Ability grouping practice. Most of the students, parents, and teachers believed that ability grouping (in particular, the adjusted instruction in ability grouped classes) benefited students of different ability levels in learning. The benefit of adjusted instruc-

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tion to high-ability students under ability grouping practice is evident in the following comments offered by two students that transferred from Group B to Group A in the second semester of seventh grade:

> In Group A, the teacher did not show us flashcards (different from the teacher in Group B). She just led us to read the vocabulary by looking at the word lists in the textbooks……The rest of the class hours were our show time. We were divided into small groups and we became teachers ourselves. (ST7)

> (Unlike in Group B,) there were a lot of interactions in Group A……Group A students spoke more English; I could learn from both the teacher and the classmates in Group A. (ST9)

Similarly, students of lower ability could learn better in ability-grouped English class due to easier learning tasks, slower teaching pace, and more opportunities but less anxiety to participate in classroom activities in the absence of high-ability students. For example, one Group B student remarked:

> The teacher did not teach very fast. She gave us a lot of practice and often helped us review in class……The teacher usually asked us easy questions. We could use the sentence structures we just learned to answer these questions……Without top students in class, I felt more relaxed to speak English. (SB3)

Ability grouping was also found to have some positive effects on students' confidence and motivation. The parent of one Group B student reported that her children became more confident as a result of learning in ability grouped class:

> He became more self-confident in Group B. He could easily fol-

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> low the teachers' instruction and understand what she said in class……especially he got good grades on quizzes carried out in Group B. (P1)

Besides, most of the Transfer interviewees that experienced both Group A and Group B classes noticed that ability grouping practice brought them both pressure and motivation to study hard, no matter which group they were in. When they were in Group A they worked hard in order to stay in the same class; when they were in Group B they studied hard with a desire to be shifted to Group A.

It is noteworthy that ability grouping practice benefited some Group B students that had negative learning experience at elementary school due to limited English proficiency. Learning in Group B at the first year of junior high school helped these students not only build up confidence but also improve English because they were given chances to learn again the basics in the low-ability class. This positive effect was revealed in the following comment from one parent:

> ……my son never went to English cram schools before; he had only one year's learning experience in elementary school. In fact, he did not like studying English at first. When he was in Group B, he did well on quizzes and tests. He felt encouraged by this experience and was motivated to work harder. I think that is why he could move to Group A in the second semester……so ability grouping benefited his English learning at seventh grade. (P8)

Nevertheless, ability grouping was not without problems. The problems identified by students, parents, and teachers were mainly psychological, including stigmatization of Group B (in particular B2) students, resentment of Group B students toward Group A students, and inflation of arrogant attitudes in Group A students. Ability grouping even caused conflicts between B1 and B2 students. Although B1 and B2 essentially belonged to the same ability level, using numbers (1 versus 2) to label classes misled stu-

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dents to believe that B1 was academically better than B2, resulting in discrimination and conflicts among students. Some B2 students reported that they were looked down upon and teased by B1 students.

Moreover, some students, teachers, and parents considered it a source of problem that the English homeroom teacher could not teach all of the students in the homeroom class when ability grouping was practiced. They felt the policy caused a sense of alienation between the English homeroom teacher and those students taught by other English teachers.

Mixed-ability grouping practice. When mixed-ability grouping was implemented, many students felt the aforementioned problems of stigmatization, discrimination, and alienation were solved. Those Group B students who had been plagued by stigmatization and discrimination felt quite happy with the abolition of ability grouping. In fact, most Group B interviewees reported that they got more encouragement from their classmates, were more motivated to study hard in the presence of more capable students and role models, and learned more in the mixed-ability, ungrouped class. Apparently, most Group B students benefited from mixed-ability grouping practice.

Mixed-ability grouping also benefited those in the low standing of Group A, as illustrated in one Group A student's statement:

> In ungrouped English class, the teaching pace was slow, and the teacher helped you review; it was easier to memorize the content in class……In Group A, the teacher thought we had learned the content before, and she skipped a lot of things and went through them very quickly. But I probably stayed at the previous stages. I needed more time to think and absorb…… (SA7)

However, some Group B students reported having even greater problems learning in ungrouped English class. No matter how hard they tried in the ungrouped class, they remained in the low standing in English and could not compete with other classmates.

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Therefore, they easily felt discouraged. Similarly, one homeroom teacher observed that several slow learners in her homeroom class totally gave up learning English in the eighth-grade ungrouped class although they had worked hard and showed willingness to try in the seventh-grade grouped class. In contrast, some Group A students reported that they became lazy and unmotivated in ungrouped English class because of the easy learning tasks and the uncompetitive learning atmosphere. In view of this problem, many parents of Group A students worried that their children would stop making any progress in English.

Ability Grouping Practice and Administrative Work

The three administrators interviewed did not find many difficulties in managing administrative work, such as forming ability groups and arranging classrooms and timetables, when ability grouping was implemented. They thought it was because ability grouping was practiced for only one year. Besides, they did not receive any serious complaints from parents about the policy of ability grouping. They, however, did mention some minor problems, including the need to deal with complaints from some teachers that could not enjoy the advantages of ability grouping, difficulty in correctly re-sorting test papers administered in the homeroom class into different ability groups, and increased workload caused by the need to create a new system to computerize grades for each grouped English class. More interestingly, the three administrators differed in their personal preferences for the grouping practices, with one advocating ability grouping, the second endorsing mixed-ability grouping, and the last one holding an ambivalent attitude towards the two grouping practices.

Similarly, all of the four homeroom teachers interviewed did not noticed serious problems in class management no matter which grouping practice was used. They, however, disagreed in support for the grouping practices. Specifically, two supported ability grouping whereas two preferred mixed-ability grouping.

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Discussion

This study evaluated two grouping practices—ability grouping and mixed-ability grouping—carried out for the subject of English at Sunny Junior High School with the same group of students in two consecutive school years. Students, parents, teachers, and school administrators that had experienced both grouping practices were interviewed and/or surveyed with questionnaires. Results regarding the perceived benefits of the two grouping practices are mixed; so are different groups of stakeholders' attitudes towards and preferences for the two grouping practices.

Benefits of Ability Grouping

As the interview data reveal, many students, parents, and teachers recognized that ability grouping could help students of different ability levels learn effectively by adjusting instructional activities and teaching pace to students' ability levels and learning rates. This finding lends support to such researchers as Chien, Ching, and Kao (2002), Hereford (1993), and Yu (1994), who argued for the advantage of ability grouping over mixed-ability grouping in improving students' learning through instructional adjustment.

What is more important, the interview data show that ability grouping benefited low achievers that had had negative learning experiences before entering junior high school because they were given chances to learn the basics again in the low-level class, thereby building up their confidence and motivation to learn English. In fact, some Group B students who were willing to try improving their English or to participate in the seventh-grade ability-grouped class were found to give up in the eighth-grade heterogeneous class, where the learning materials and tasks became far beyond their abilities.

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This finding suggests that ability grouping may benefit students in the high standing of low-level class, who tend to hide themselves in the crowd in a mixed-ability class (Kelly, 1969).

Furthermore, most interviewees of the Transfer Group claimed that ability grouping practice motivated them to study hard, no matter which ability group they were placed into. Like Group A in the present study, the Transfer Group perceived instruction in ability-grouped classes smoother than Group B did. Unlike the elementary school students in Chiang's (2000) study, those Transfer students did not see transferring to a lower group as a matter of losing face, but a source of positive pressure for them to make improvement. This finding is consistent with previous research that suggests positive impact of ability grouping on students' self-concept and attitudes towards the subjects when grouping is used only for specific subjects (Goldberg, Passow, Justman, 1966; Ireson, Hallam, Plewis, 2001; Kulik, 1981; Kulik, 1992; Slavin, 1987), and more importantly, when students appreciate the advantage of ability grouping (Hallam et al., 2000; Lou, 1986; Kulik, 1981; Su & Lin, 2003; Yu, 1994).

Nevertheless, analyses of the questionnaire data indicate that ability grouping may benefit high-ability students more than low-ability students. Specifically, Group A considered the flow of classroom activities smoother and learning more interesting in ability-grouped class than in ungrouped class although the learning tasks were more demanding and the pressure of public performance was higher in grouped class. They also perceived themselves and their classmates concentrated better in grouped class than in ungrouped class. Besides, their rating of the fun level of the grouped English class as well as their peers' concentration level in ability-grouped class was higher than that by Group B. In contrast, they reported a lower degree of difficulty accessing role models and familiar peers for consultation in grouped class than Group B did. In light of these results, it is not surprising that Group A reported making greater progress and feeling more confident in themselves when they were in grouped class than Group B did.

Kulik and Kulik (1982) claimed that ability grouping could benefit high achievers

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through enriched curriculum and stimulation of capable peers in the high-level class. Note that the two levels of classes (Group A and Group B) at Sunny Junior High School used the same set of textbooks and took midterm and final exams of the same contents. However, different instructional approaches were adopted in each level of class. Group A class more often involved contextual learning, high-order cognitive activities, and student-centered discourse than Group B class. While lectures and drills took up most of the class time of Group B, such activities as oral presentations and role plays that require application of linguistic knowledge to communication often occurred in Group A class. This finding is quite similar to the reports on high-ability classroom activities by French and Rothman (1990), Gamoran (1989; 1993) and Page (1991). Taken together, these results suggest that instructional differences favor high-level groups when classes of different ability levels share the same course outlines (Gamoran & Berends, 1987).

Problems of Ability Grouping

Despite its benefits, ability grouping brought about many problems among students, most of which were in the affective domain. First and foremost, both interview and questionnaire data reveal that ability grouping placed a stigma upon students in the low-level group (i.e., Group B and especially B2), as reported in Burroughs and Tezer (1968) and Chen (2005). Student interviewees further pointed out that the labels of B1 and B2, which did not carry any substantial meaning, caused unexpected conflicts between B1 and B2 students. For the latter were thought to rank academically lower than the former. Differentiation of ability levels also resulted in low-level group's (Group B's) resentment and hostility towards high-level group (Group A) that exhibited superiority and arrogance obscured in mixed-ability classes (Esposito, 1973; Wilson & Schmits, 1978). Ability grouping caused psychological problem not only to students in the low-level group but also to low performing students in the high-level group. Because they were not able to compete successfully with the high performing students, low achievers

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in Group A were under great stress and often felt frustrated, reflecting the negative big-fish-little-pond effect (Boaler, Wiliam, & Brown, 2000; Eder, 1979; Ireson et al., 2001).

Besides, those who had transferred between Group A and Group B depicted Group A and Group B classes in the same way as Eder (1982), French and Rothman (1990), and Page (1991) did: Low-group lessons were often more boring and repetitive than high-group lessons. Therefore, more students were off-task and inattentive in Group B than in Group A. On top of the aforementioned problems, ability grouping brought English teachers and administrators such problems as increased workload and difficulty in classroom management.

Advantages of Mixed-Ability Grouping

As the interview data show, mixed-ability grouping offered one solution to the psychological problems and interpersonal conflicts resulting from ability grouping practice implemented in the previous year. Students that used to be in the low-level group were relieved of the attachment of stigma. Those in the low standing of the high-level class were rid of the pressure to absorb knowledge of English at an intolerably racing speed. The conflicts between high-level and low-level classes were resolved with the breakdown of the physical boundaries of ability grouped classes. Furthermore, English teachers' and school administrators' work stress was reduced. These findings suggest that mixed-ability grouping may be an educational practice more beneficial to the mental health of students and teachers than ability grouping.

Moreover, consistent with the claim made by Ireson, Hallam, Hack, Clark, and Plewis (2002), mixed-ability grouping appears to benefit low achievers more than high achievers in this study. According to the questionnaire data, Group B felt significantly less stigmatization in mixed-ability, ungrouped class than in ability-grouped class. In total contrast to Group A, they felt less confident in ability-grouped class. Also different from Group A, they perceived the ungrouped class more interesting than the grouped

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class and their classmates in grouped class less concentrated. Besides, they agreed less than Group A that they could find role models in grouped class. In fact, they felt it easier to find role models in the eighth-grade mixed-ability class than in the seventh-grade Group B class. They also considered it easier to access familiar or more capable peers to consult in ungrouped class than in grouped class[7]. What is more, Group B, together with Transfer, perceived their peers in grouped class less willing to help each other learn English than their peers in mixed-ability class. These results on peer relationship suggest that when ability grouping is practiced, students in low-level groups may be deprived of the example and stimulation that could be provided by capable learners or high achievers (French & Rothman, 1990; Oakes, 1985). Apparently, one of the greatest advantages of mixed-ability grouping lies in the assistance and modeling high performing students can offer to the low performing learners. Group B interviewees also reported that they studied harder in the mixed-ability class due to competition with high performing classmates and learned more because of enriched learning contents. No wonder Group B was much happier than Group A with the abolition of ability grouping.

Problems of Mixed-Ability Grouping

Generally speaking, the results of this study suggest that mixed-ability grouping favors low achievers and causes fewer psychological or interpersonal problems among students and teachers. However, mixed-ability grouping was not free of problems. As expected, the most obvious problem of mixed-ability grouping is the difficulty for teachers to provide instruction of an appropriate level of challenge to most of the students in a mixed-ability, ungrouped class. The interview data reveal that many students in Group A considered the instruction in ungrouped class not challenging enough for them

7 It is interesting to find that Group A and Transfer agreed with B in the relatively easier access to capable peers in ungrouped class than in ability-grouped class, even though Group A agreed more strongly than Group B that it was easy to access capable peers in grouped class,.

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to work hard while some Group B students felt their needs were sacrificed as average or high achievers came into focus in the heterogeneous class. Consequently, these students of Group B felt ignored and desperate, reported more serious difficulties catching up with others, and ultimately chose to give up in the mixed-ability class. It comes as no surprise that Group B agreed less than Transfer Group that the flow of classroom activities was smooth and that they could make progress in the ungrouped class. The finding that students in the low-level group (Group B) made less progress than their more proficient counterparts (Transfer) in the mixed-ability class is counter to the expectation of French and Rothman (1990), Gamoran and Berends (1987), Hallinan (2000), and Ireson et al. (2002). This finding cautions educators against taking it for granted that mixed-ability grouping practice can increase the achievement of low performing students.

Stakeholders' Attitudes Towards Grouping Practices

Different groups of stakeholders demonstrated divergent attitudes towards the two grouping practices. Parents' attitudes towards the grouping practices were related to the groups their children were assigned to at seventh grade. Specifically, parents of Group A and Transfer supported ability grouping more than parents of Group B; but parents of Group B held a more negative view toward ability grouping than parents of Group A. Nevertheless, more than half of the parents (57.1%) endorsed ability grouping in English class and only 30% of them advocated mixed-ability grouping. To parents, learning efficiency appears to be a more important consideration in deciding grouping practices.

Students' attitudes towards the grouping practices showed a similar pattern to their parents'. That is, students of Group A and Transfer had more positive responses to the grouped English class than those of Group B; but Group B had more positive responses to the ungrouped English class than Group A and Transfer. As a result, more Group A students opted for ability grouping whereas more Group B students chose mixed-ability grouping. However, different from their parents, nearly half of the entire students

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(49.8%) showed their preference for mixed-ability grouping; only 25.1% of the students supported ability grouping. The students seemed to care more about good peer relationship when determining the grouping practice.

The administrators and teachers were divided in their attitudes towards the grouping practices. The number of school faculty supporting each of the two practices was nearly equal. Workload turned out to be one major concern in their choice of the grouping practice.

Conclusions

This study is one of the few studies that evaluated ability grouping practice against mixed-ability grouping practice with the same group of students. Based on the results of this study, we are still unable to declare which grouping practice is unequivocally good or bad for English class at a junior high school, where wide discrepancy in students' English proficiency poses a big challenge to teachers. The two grouping practices each had advantages and disadvantages. The participants of this study were not unanimous in their support for the two grouping practices. Students and parents differed in their acceptance of the two grouping practices. School faculty members were divided in their preferences for the two practices.

Although this study fails to provide strong evidence to prove which grouping practice is better, some general conclusions and implications can be drawn based on the findings of this study. First, analyses of student questionnaires found few (4 out of potential 19) significant interaction effects between students' group membership (i.e., group A, Group B, and Transfer) and grouping practices. The results indicate that to each group of students, in most cases learning under the two grouping plans did not make great difference. As suggested in Kulik (1992), it is likely that no differentiation in textbooks between the two levels of classes and the broad (two-level) grouping policy diminished

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potential contrasting effects of the two grouping practices on teaching and learning, be it in the cognitive, affective, or social aspects. What is more, the policy of having each English teacher teach both levels of classes, representing a way of equal allocation of teacher resources, might also mitigate the differentiating effects of ability grouping. In view of these findings, the ability grouping practice of Sunny Junior High School might be a choice for schools and teachers that want to somewhat reduce the disparity in student ability levels in one class and find a reasonable ground for instructional adjustment through ability grouping, but do not hope to thereby create grave impacts. However, if the goal of the program is to bring about strong effects of ability grouping on students' learning or achievement, finer differentiation of ability levels and curriculum, as recommended in Chien, Ching, and Kao (2002), may be needed, though probably at the risk of causing serious problems in other aspects (e.g., conflicts and discrimination among students).

Secondly, in comparison with the number of significant interaction effects, the number of significant main effects found in the analysis of student questionnaires was relatively large (4 vs. 14). The results suggest that group membership and grouping practice respectively played a significant role in students' responses. To be specific, students of different groups (A, B, or Transfer) felt differently about learning and teaching under each of the two grouping plans. The two grouping practices also had differential impacts on students' perceptions about English learning and teaching. The questionnaire and interview data consistently suggest that high-level students (Group A) preferred ability-grouped class while low-level students (Group B) liked mixed-ability, ungrouped class. Correspondingly, ability grouping favored high-level students due to enriched and accelerated curriculum, competitive learning atmosphere, and sufficient opportunities to work with equally capable peers in the high-level class. Mixed-ability grouping benefited low-level students more by ridding them of stigmatization and allowing them access to challenging learning contents, role models, and capable peers for consultation in the heterogeneous class. These findings present a dilemma to schools

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and teachers—whose benefit should we give more weight to in deciding the grouping practices, the high performing students or the low performing students?

Despite difficulties in resolving the above-mentioned dilemma, the following findings suggest that judicious use of an ability grouping plan that takes into consideration students' cognitive and affective needs could be beneficial to most of the students at a junior high school: (1) Low performing students who had negative English learning experiences before entering junior high school could make progress and gain self-confidence and learning motivation by the ability grouping policy that offered them chances to learn the basics again. These students might have more problems learning English in the homogeneous class where instruction was not aimed at them. (2) Those in the low standing of Group A could not benefit from the instruction in the high-ability class characterized by fast teaching pace and an abundance of supplementary materials. (3) Students' motivation would be increased if they were allowed to move upward or downward in level each semester depending on their English achievement. (4) Names denoting ranking, such as A vs. B and B1 vs. B2, could cause stigmatization and discrimination.

Considering the needs of high and low performing students and equity of education, one sensible grouping plan for the subject of English is to have the majority of the students stay untracked and study English in their homeroom classes. Only a small number of advanced classes, probably in the name of an honors program, are offered to students that pass an entry exam. Students, after consulting with their parents, are granted the liberty of deciding whether to take the exam or not. To avoid the problem of stigmatization, instead of placing low functioning students into a separate group that carries a negative stigma, bridge courses should be provided to them, perhaps in winter or summer vacation. Because mobility could function as a motivator for students to study harder and reduce the problems of labeling students as belonging to a particular group, it should be promoted by means of regular and flexible reassignment of students to the advanced or regular classes based on their progress in English learning.

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If, with reason, a grade-wise between-class ability grouping plan for one or two particular subjects is to be implemented, it is suggested that, in addition to flexible grouping or reassignment, the following principles be followed: (1) Avoid assigning low-level groups to the same teacher to prevent the morale of the teacher from being terribly affected. (2) Ease students' and parents' worries about unequal access to the curriculum by having all levels of students share the same set of core textbooks. But different supplementary materials and learning tasks should be developed for each level, taking into account students' ability levels. To reduce the workload increased by preparing different sets of teaching materials and learning tasks, teachers had better collaborate with each other on preparing lessons. (3) Help students understand sufficiently the rationales and advantages of the grouping policy. (4) Be careful in naming groups of different levels, avoiding names that denote ranking or carry negative connotations.

When a grade-wise between-class ability grouping is put into practice, it is imperative that efforts be made to ensure that students identify primarily with a heterogeneous homeroom class, rather than the ability group they each are assigned to for a particular subject, such as English in this study. To achieve this, instead of starting the ability grouping plan from the outset of junior high school, students had better be arranged to study English in homeroom class for at least one semester. This policy may not only help students get identified with the homeroom class but also eliminate some potential problems of ability grouping. For instance, given some time to teach and thus get familiar with the whole homeroom class, each English homeroom teacher may have fewer problems in managing the class regrouped for English later, with parts of the students taught by another English teacher. Besides, the chances of misplacement may be reduced because students can be grouped into different levels based on more than one source of information: students' academic achievement in English, their performance on a placement test, and English and/or homeroom teachers' observations of their in-class performance and participation for one semester or more.

Before closing this paper, some major limitations of the study are in order. First,

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the generalizability of the findings is limited because only one school was involved in this study. Second, the subjects had to recall their learning in the seventh-grade grouped classes and eighth-grade ungrouped class when filling out the questionnaires and being interviewed. The lapse of time and memory might reduce the reliability of the reported data. Third, the students who transferred upwards and downwards were categorized as belonging to one group—Transfer—when questionnaire data were analyzed. Without distinguishing between upwards-transferred students and downwards-transferred students in data analysis, interpretations regarding the responses of the Transfer group should be taken cautiously. At last, this study evaluated the effects of the two grouping practices on students' learning based on perception data, instead of actual academic performance. The fact that the two grouping plans were implemented in two consecutive school years made it impossible to evaluate their respective effects adopting a pre- and post-test experimental design that controls all other possible causes of differential learning, such as differences in learning materials and years of formal instruction. Research is much desired that could offer more objective evaluation of the two grouping practices.

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References

Boaler, J., Wiliam, D., & Brown, M. (2000). Students' experiences of ability grouping-disaffection, polarization and the construction of failure. *British Educational Research Journal, 26* (5), 631-648.

Bryan, M. M., & Findley, W. G. (1970). *Ability grouping: 1970-II. The impact of ability grouping on school achievement, affective development, ethnic separation and socioeconomic separation.* (ERIC Document Reproduction Service No. ED 048 382)

Burroughts, F., & Tezer, P. (1968). *A response to major problems in second-language teaching.* (ERIC Document Reproduction Service No. ED 031 504)

Chang, W. C., Chou, C. T., Chen, C. Y., Yeh, H. N., Lin, C. C., & Hsu, Y. K. (2003) *A study on the twin-peak phenomenon in English Basic Competence Test in Taiwan.* Taiwan: MOE.

Chen, T. C. (2002). Problems and prospects of English teaching at elementary school. *The Educator Monthly, 425*, 15-19.

Chen, Y. C. (2005). *Elementary school English ability grouping teaching: A case study of Taichung Municipal Dongsing Elementary School.* Unpublished master's thesis, National Taipei Teachers' College, Taipei, Taiwan.

Chen, Y. H. (2004). *Elementary and junior high school English teachers' perceptions and implementation of remedial instruction for underachievers.* Unpublished master's thesis, National Taiwan Normal University, Taipei, Taiwan.

Chen, Y. P. (2004). *Investigation of 7th graders' EFL proficiency discrepancy in relation to their family background.* Unpublished master's thesis, National Kaohsiung Normal University, Kaohsiung, Taiwan.

Chiang, K. C. (2000). *A case study of an elementary school? s English curriculum and teaching.* Unpublished master? s thesis, National Taichung Teachers? College, Ta-

NATIONAL CENTRAL LIBRARY 國家圖書館 ROC

ichung, Taiwan.

Chien, C. N. (1987). A study on the effects of ability grouping in English class at Chung Yuan Christian University. *Journal of Chung Yuan Christian Univesity, 16*, 74-49.

Chien, C. N., Ching, H. L., & Kao, L. H. (2002). An empirical study on ability grouping practice in English class. *Proceedings of 2002 Conference and Workshop on TEFL & Applied Linguistics*, 185-198. Taipei: Crane Publishing Co., Ltd.

Chou, Y. C., & Luo, B. (2003). Effects of leveled and mixed ability grouping on English learning motivation in Taiwanese elementary education. *Proceedings of the 20th International Conference on English Teaching and Learning in the Republic of China*, 411-420. Taichung: Providence University.

Eder, D. (1979). *Ability grouping and students' self-esteem*. (ERIC Document Reproduction Service No. ED 181 016)

Eder, D. (1981). Ability grouping as a self-fulfilling prophecy: A micro-analysis of teacher-student interaction. *Sociology of Education, 54*(3), 151-162.

Eder, D. (1982). *Peer influence on student attentiveness during classroom lessons*. (ERIC Document Reproduction Service No. ED 219 671)

Esposito, D. (1973). Homogeneous and heterogeneous ability grouping: Principal findings and implications for evaluating and designing more effective educational environments. *Review of Educational Research, 43*(2), 163-179.

French, D., & Rothman, S. (1990). *Structuring schools for student success: A focus on ability grouping*. (ERIC Document Reproduction Service No. ED 315 501)

Gamoran, A. (1989). Measuring curriculum differentiation. *American Journal of Education, 97* (2), 129-143.

Gamoran, A. (1993). Alternative uses of ability grouping in secondary schools: Can we bring high-quality instruction to low-ability classes? *American Journal of Education, 102*(1), 1-23.

Gamoran, A., & Berends, M. (1987). *The effects of stratification in secondary schools:*

NATIONAL CENTRAL LIBRARY 國家圖書館 ROC

Synthesis of survey and ethnographic research. (ERIC Document Reproduction Service No. ED 288 855)

Goldberg, M. L., Passow, A. H., & Justman, J. (1966). *The effects of ability grouping.* New York: Teachers College Press.

Hallam, S, Ireson, J., Mortimore, P., & Davies, J. (2000). *Children's socialization into schools' learning contexts: Ability grouping in the UK primary school.* (ERIC Document Reproduction Service No. ED 440 761)

Hallinan, M. T. (2000). *Ability group effects on high school learning outcomes.* (ERIC Document Reproduction Service No. ED 467 684)

Hereford, N. (1993). Making sense. *Instructor, 102*, 50-52.

Hollifield, J. (1987). *Ability grouping in elementary schools.* (ERIC Document Reproduction Service No. ED 290 542)

Hsiao, Y. C. (2006). *Effects of tracking on the motivation and English achievements of junior high EFL students in Taiwan.* Unpublished master's thesis, National Kaohsiung Normal University, Kaohsiung, Taiwan.

Huang, Y. W. (2002). *The influence of different grouping methods on junior high school students' oral performance in mixed-ability classroom.* Unpublished master's thesis, Tamkang University, Taipei, Taiwan.

Ireson, J., Hallam, S., & Plewis, I. (2001). Ability grouping in secondary schools: Effects on pupils' self-concepts. *British Journal of Educational Psychology, 71*(2), 315-326.

Ireson, J., Hallam, S., Hack, S., Clark, H., & Plewis, I. (2002). Ability grouping in English secondary schools: Effects on attainment in English, mathematics and science. *Educational Research and Evaluation, 8*(3), 299-318.

Kelly, R. L. (1969). Ability grouping in English. *Clearing House, 43*(9), 547-552.

Kulik, C. C. (1981). *Effects of ability grouping on secondary school students.* (ERIC Document Reproduction Service No. ED 204 417)

Kulik, C. C., & Kulik, J. A. (1982). Effects of ability grouping on secondary school stu-

NATIONAL CENTRAL LIBRARY 國家圖書館 ROC

dents: A meta-analysis of evaluation findings. *American Educational Research Journal, 19* (3), 415-428.

Kulik, J. A. (1992). *An analysis of the research on ability grouping: Historical and contemporary perspectives*. (ERIC Document Reproduction Service No. ED 350 777)

Lin, C. J. (2004). *A study in Taiwanese EFL junior high school students' English learning anxiety in the ability grouping context*. Unpublished master's thesis, National Changhua University of Education, Changhua, Taiwan.

Lin, C. Y. (2003). *A study on the status quo of elementary school English education and factors that influence the implementation of English education policies*. Unpublished master's thesis, National Taichung Teachers' College, Taichung, Taiwan.

Lou, L. (1986). *A study on students' adaptive behaviors under ability grouping practice*. Unpublished master's thesis, National Taiwan Normal University, Taipei, Taiwan.

Lu, C. H. (1991). *An investigation of ability grouping in junior high schools in Taiwan*. Unpublished doctoral dissertation, University of Texas, Austin, USA.

Luo, B. (2005). Achievement grouping and students' progress in freshman English classes at Feng Chia University. *Feng Chia Journal of Humanities and Social Sciences, 11*, 253-279.

Nicholson, J. A. (1998). *What research says about ability grouping and academic achievement*. (ERIC Document Reproduction Service No. ED 426 129)

Oakes, J. (1985). *Keeping track: How schools structure inequality*. Binghamton, New York: Vail-Ballou Press.

Page, R. N. (1991). *Lower-track classrooms*. New York: Teachers College Press.

Reid, M. I., Clunies-Ross, L. R., Goacher, B., & Vile, C. (1981). *Mixed ability teaching*. UK: NFER-NELSON.

Slavin, R. E. (1986). *Ability grouping and student achievement in elementary schools: A best-evidence synthesis. Report No. 1*. Baltimore, MD: Center for Research on Elementary and Middle Schools.

NATIONAL CENTRAL LIBRARY 國家圖書館 ROC

Slavin, R. E. (1987). Ability grouping and its alternatives: Must we track? *American Education: The Professional Journal of the American Federation of Teachers, 11* (2), 32-36, 47-48.

Slavin, R. E. (1990). Achievement effects of ability grouping in secondary schools: A best-evidence synthesis. *Review of Educational Research, 60*, 471-499.

Su, C., & Lin, Y. C. (2003). Ability-grouping practice in second year reading class at Wenzao Ursuline College of Languages. *Selected papers from the 12th International Symposium on English Teaching*, 494-499. Taipei, Taiwan: The Crane Publishing Company.

Wang, S. P. (1998). An empirical study on ability grouping in college English class. *Proceedings of the15th International Conference on English Teaching and Learning in the Republic of China*, 310-330. Taipei: Crane Publishing Co., Ltd.

Wilson, B. J., & Schmits, D. W. (1978). What's new in ability grouping? *Phi Delta Kappan, 59*(8), 535-536.

Wu-Yen, H. H. (2006). *The implementation of the Taoyuan County's elementary school English educational plans and their influence to the English teaching*. Unpublished master's thesis, National Taipei University of Education, Taipei, Taiwan.

Yu, C. F. (1994). The assessment of ability grouping in the college lab program: The Soochow experience. *Soochow Journal of Foreign Language and Literatures, 10*, 45-77.

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