

ERIC JOHNSON, MA FU AND BOB ADAMSON

9. DEVELOPING TRILINGUAL EDUCATION IN WESTERN CHINA

INTRODUCTION

Among the educational pressures associated with the forces of globalization and modernization experienced by China, the linguistic challenges for schools in ethnic minority areas are particularly daunting. Through a confluence of different policy streams (Adamson, Feng, Liu, & Li, 2013) that focused on sustaining ethnic minority languages, promoting Putonghua and expanding the provision of English respectively, schools in these regions are often expected to adopt a trilingual approach to education, encompassing the local ethnic language, Chinese (as the national language) and a foreign language, usually English, that is associated with internationalization. The problem affects a large number of students—there are 55 officially-recognized ethnic minority groups in China, numbering around 114 million people (some 8.5% of the total population) (*People's Daily*, 2011)—and is exacerbated by the fact that the minority groups are often, but not exclusively, located in rural and underdeveloped areas of the country. Western China is heavily populated by different ethnic minority groups.

The approaches adopted for incorporating trilingualism into school systems vary widely, as regions enjoy considerable autonomy in curriculum implementation. Research (see, for example, Adamson & Feng, 2014; Feng & Adamson, 2015) suggests that four distinct models are discernable: the Accretive, Balanced, Transitional and Depreciative. The first two are supportive of the ethnic minority language, either by making it the major language in the school (the Accretive model) or by offering it as a parallel stream to one in Chinese (the Balanced model). The other two models, which are more commonly found, are potentially deleterious to the ethnic minority language, by limiting the curriculum provision to the early stages of elementary school before making Chinese the dominant language (the Transitional model) or by omitting it entirely from the curriculum, despite claims to the contrary (the Depreciative model). The respective roles of the ethnic language and Chinese in schools are contentious issues, tied up with questions of identity, social equity, political and economic power, demographics and deployment of available resources. Across the four models, Chinese—the language of national unity and of socio-economic mobility—is the strongest language, even in ethnic minority regions that have a powerful sense of cultural identity (Adamson & Feng, 2015). However, the value of the students' first language to enable more effective learning across the

curriculum is often overlooked in the debates. Meanwhile English—prestigious as an international language and important for access to higher education and some employment opportunities—is weakened by the lack of trained teachers and appropriate resources. In many regions, there is a severe shortage of ethnic minority teachers able to teach English, meaning that many students have to learn their third language through the medium of their second language (Chinese), as the schools have to recruit English teachers from the majority Han group.

These two issues related to ethnic minority education—the potential of the students' first language in enhanced learning and the lack of minority teachers of English—form the focus of two initiatives that are presented in this chapter. The first case is a project from the Zhuang-dominated Zhetu Township in Yunnan Province, in which secondary students were taught through their first language. The second case describes an innovative teacher development program designed to enhance the trilingual competence of teachers from Tibetan-speaking areas of Qinghai Province. Both projects go against the grain of prevailing practices and pioneer alternative perspectives of education in trilingual contexts.

CASE 1: YUNNAN

Background

The students involved in this study live in Zhetu Township of Guangnan County, which has a population of 36,711 in 2005, in 116 villages, of which 106 villages are Zhuang.¹ More than 90% of the district population is Zhuang, and the vast majority of the Zhetu Zhuang speak the Yan-Guang Vernacular of the Southern Dialect of the Zhuang language, which is called “Nongz” ([n^wɔŋ³³] or “Daez” [tɛi³³]) by its speakers (Wang & Johnson, 2008). The research focused on seventh grade students as this is the first year in which most rural Zhuang students begin study of English. All high school students in China must study English and must take tests in written English in order to continue on with their schooling. At the time of this study, the textbooks that were used to teach English and exams used to test progress in the school where this study took place were written in Chinese. Students whose mother tongue is not Chinese, and who enter elementary school not speaking Chinese, in addition to learning the written Chinese characters, must also learn oral Chinese, including grammar, pronunciation, vocabulary, idioms, etc. Though most minority students by the time they reach secondary school have a basic mastery of written and oral Chinese (basic interpersonal communicative skills, or BICS as outlined by Cummins (1984)), some in minority language areas still struggle with academic content taught using the Chinese language due to their lack of developed cognitive/academic language proficiency, or CALP (Cummins, 1984). When these students study English in junior secondary school, they do so through the medium of Chinese, a language they have not yet mastered, which naturally puts them at a disadvantage when compared with their Han majority peers.

Zhou (2000) has proposed a typology of minority languages based upon the existence of a script and its use in the education of students in minority areas. Type 1 communities had a traditional script prior to the formation of the People's Republic of China in 1949 and have consistently used that language and script in education, even to this present day. Type 2 communities had a functional writing system in place before 1949 and have occasionally used their language and script in education since. The Zhuang area in question in this study falls into the third category of minority language communities in China, namely, one that did not have a pre-existing script or bilingual education prior to 1949, and have had little or no bilingual education since. In such areas instruction in the minority language is largely bypassed in favor of a more economically feasible, yet arguably less effective form of 'Chinese language only' instruction for most school subjects, including English (Finifrock & Schilken, 2015).

Zhou (2001) states that "with no bilingual education and without adequate Chinese, some groups of Type 3 communities have not been able to make good progress beyond primary education." The Zhuang community in this study would certainly fall into that category.

Given this situation, as well as other factors, it is not surprising that English test scores are often quite low for rural minority secondary school students.² As a national educational goal is to narrow the gap in educational achievement between ethnic minority students and those of the Han majority,³ Chinese educators are seeking ways to improve the English test scores of minority students in order to not hold back otherwise qualified students from succeeding in the school system and society.

Theory

The project was designed to test the hypothesis that minority language students will be more successful in learning English when they can employ their minority language as a learning tool as suggested by Xiao (2003).⁴ Evidence exists in Type 1 communities, such as the Korean speaking areas of Jilin province (Zhang, Li, & Wen, 2015), and Type 3 communities, such as the Kam speaking areas of Guizhou (Finifrock, 2010; Finifrock & Schilken, 2015) that where the minority language has been used as the first language of instruction and as a medium of instruction students seem to be able to learn second and third languages more efficiently. In those examples, however, there exists a relatively strong form of bilingual education that was implemented over many years and in a broader scale than was possible in this project. Due to the lack of minority language speaking teachers and the required use of Chinese language texts and tests in this study it was not feasible to use the minority language as the primary medium of classroom instruction. Thus it was hypothesized that perhaps even a small amount of minority language supplementation in study hall time outside of formal class hours may improve minority students' vocabulary retention and testing performance. Perhaps this supplemental support using L1 in learning English (L3) would allow minority speakers to perform better on tests that

nonetheless require a high level of Chinese (L2), a problem that has been raised by Sunuodula and Feng (2011).

Research Design

The listening portions of the standard seventh grade national English textbook were translated into the Nong Zhuang dialect (known as the Yan-Guang Vernacular of the Southern Dialect of Zhuang by Chinese linguists) as spoken in Zhetu District of Guangnan County.⁵ The Nong Zhuang translation was checked for accuracy and naturalness by Lu Baocheng of the Yunnan Language commission, himself a mother-tongue speaker of Nong Zhuang from Guangnan County, as well as a professional linguist and professor of Zhuang. The scripts were audio recorded and edited to produce a set of tutorial recordings aligned with the national seventh grade textbook. Mandarin Chinese and English medium tutorial recordings were also produced, for use in the control groups, with identical content. The tutorial recordings consisted primarily of individual sentences, dialogues, short monologues and vocabulary lists. Each item was read at normal speed in English, followed by either a Zhuang or Chinese translation or gloss, and then two more slow repetitions of the English pronunciation with pauses in between so the students could repeat the utterance while listening.

With the cooperation of the Guangnan County Education Department as well as administration of the Zhetu District Central Middle School, researchers obtained permission for the recordings to be used to guide the students' English language class study hall sessions one to three times per week, according to the school's scheduling. The content of the recordings corresponded to the course material scheduled for that given week such that the audio Zhuang-English or Chinese-English recordings supported the classroom instruction. The students were encouraged to visually review their textbooks as they listened to the recordings and to repeat the English pronunciations after the recordings.⁶ Class instruction itself was not altered by this program.

Consent was provided by the county education department, school administrators, the English teachers of the individual classes and the students themselves. At the start of the two testing phases, English teachers explained the project to the students orally and the students were also provided a brief introduction to the project in Chinese. Students were given the opportunity to give permission for their test scores to be used for analysis with assurance of no repercussions if students chose not to authorize the use of their results. Students were told that their personal information would be kept confidential and results would only be displayed by use of an identification number assigned by the researchers.

Students who did not speak the Zhuang language at home were assigned to one of the two control groups that listened to Mandarin Chinese recordings and their results were not considered in the analysis. The Zhuang-speaking students remained with

their cohort. Cohort assignment was done by the school at the start of the seventh grade and was based upon sixth grade performance in such a way that each cohort received equal proportions of high performing, mid-performing and low-performing students. Thus we can assume that the Zhuang-speaking student populations in the various cohorts were more or less equal with regards to language abilities and academic abilities. Each English teacher taught two cohorts so one of each teacher's cohort's was chosen as a control group (Chinese and English recordings) and the other to be a test group (Zhuang and English recordings). Other than that, the decision of which cohorts to select as control groups and which to select for test groups was random. Therefore for our purposes, we can assume that the Zhuang-speaking students were randomly distributed for the variables of Chinese ability, academic ability, gender, and balanced between the test and control group for the variable of teacher effectiveness. The various test groups and control groups all listened to the recordings at the same time periods for the same duration.

During the first phase, the participating students were assessed as to English vocabulary retention with an assessment designed by the researchers that focused exclusively on the English vocabulary taught in the textbook and recordings during the first seventh grade semester. During the second phase, three assessments were used, the same assessment used in the first phase, a follow-up vocabulary assessment focusing on the vocabulary taught in the second semester textbook and the students' final seventh grade English course scores, largely based upon their performance on their final exam.

Results

The first testing phase had 150 Zhuang-speaking students' test results for comparison, of which 63 had participated in a control group and had listened to the Mandarin Chinese and English recordings, and 87 had participated in a test group and had listened to the Zhuang and English recordings.⁷ The average score for the test groups was 13% higher than the control groups' average score. In the control groups, more than half the students (55%) did not correctly identify half of the tested English vocabulary items, whereas in the test groups almost two-thirds of the students (64%) were able to identify at least half the words. Only one in eight students in the control groups identified 80% of the English vocabulary items, whereas one in three students in the test groups reached this level. The difference between the control and test groups is statistically significant at 85% probability. Because this is a relatively low level of statistical significance (due to the low sample size and high standard deviation) it was decided to conduct a second testing phase with a larger sample over a longer period of time—two semesters.

The number of eligible subjects who completed the second phase was 308 students, evenly distributed between the control group and test group, with 154 students in each. On the fall semester vocabulary assessment, students in the test

groups scored 12.70% higher than those in the control groups, on average. This difference is statistically valid at a 99% confidence threshold (using the double-tailed t-test). On the spring semester vocabulary assessment, test group students tested 12.10% higher than those in the control groups, on average, a difference statistically significant at 98% confidence level. In terms of the student's overall seventh grade English marks as assigned by their teachers, the students in the test groups received marks 12.12% higher than the control groups.⁸ This difference is statistically significant at a 99% confidence level. Chinese high school class marks (grades) are considered "moderate" at 31–59 points, "qualified" at 60 points and above and "high" at 80 points and above, whereas 30 points or below is considered "low" or failing. Whereas 40% of the control group students failed to achieve the minimum 30 point scores in English, only 24% of the test group students were in this category. While 14% of the test group received marks of 60 points or higher, only 9% of the control group reached this level. So the effect of the experimental method on the student population appears to be that it allowed some otherwise failing students to move from the failing level up into the moderate or qualified level, without having much impact on the high achievers.⁹

While all three indicators used in the second phase, as well as in the first phase assessment, show similar improvement levels between the two groups, when analyzed by gender, a more striking difference appears among male students in the two groups than among female students. Among the subjects, males had an average course mark of 36.45 while females had an average mark of 40.04, a difference of almost 10%. This may reflect that fact that poorly qualified female students are less likely to attempt high school than poorly prepared male students in rural areas.¹⁰ However, on our own English vocabulary assessments, the gender difference was more pronounced, with female student scores 12.00% higher than those of male students on the fall assessment and 17.90% higher on the spring assessment.¹¹ When the average mark of males in the test group is compared with that of males in the control group, the difference is 12.97%, whereas the difference between the marks of female students in the two groups is only 11.99%, showing that the variable has slightly more impact on male students than females.¹² This appears to indicate that the variable has a greater impact on male students' English vocabulary retention than it does on that of female students, possibly in part because the female students already do better in English than the male students and we have observed that the variable affects low-performing students more than high-performing students. Presumably this is because the purely Mandarin Chinese oral instruction, written textbooks and study hall tutoring present more of a learning barrier to the low performing students, whose low performance may be, at least in part, be due to inadequate bilingualism. Exposure to the tutorial recordings using the students' first language, even at an amount of only one hour or less a week, appears to be enough to positively affect these students' scores, reducing the percentage of failing students and increasing the percentage of students meeting the criteria for moderate or qualifying marks.

Conclusion

This study has attempted to evaluate the effect of the use of first language materials to supplement the standard high school teaching of English to linguistic minority students. Due to the requirements of the high school curriculum, schedule and teaching procedures, students were normally only exposed to first language instructional materials for about one hour per week during the semester, during an early morning study session before the commencement of their first period class. Even with such minimal exposure, data from four different assessments, including one conducted by local English teachers based upon the national seventh grade English exam, demonstrated a 12% improvement in student English scores. The method employed for this research has a low financial cost and requires very little disruption of the existing educational methods, yet produces significant benefit for the students. Therefore it is our recommendation that methods like this be tested more widely in other linguistic minority schools. With greater support by local English teachers, and more regular and frequent usage, the impact could be even greater.

CASE 2: QINGHAI

Background

Qinghai Province is located in north-west China, high on the Qinghai-Tibet Plateau. Geographically, it is famous for the extensive salt-water Qinghai Lake and for being the source of the Yangtze, Yellow and Lancang rivers. It is also the province with the highest population of ethnic minorities in terms of percentage. Out of a total population of around 5.6 million, just under half belong to ethnic minority groups such as Tibetan, Hui, Tu, Sala and Mongolian. Tibetans—the main focus of this case study—make up the largest proportion, numbering 1.1 million. Some 98% of the administrative districts in Qinghai Province are designated as ethnic minority autonomous regions, including five Tibetan autonomous prefectures, namely Haibei, Hainan, Huangnan, Yushu and Guoluo, and one Mongolian and Tibetan Autonomous Prefecture, Haixi (Ma & Renzeng, 2015).

Tibetans have their own oral and written language, with records of the latter dating back to the 7th century. As a pastoral, nomadic people, literacy levels were traditionally low, but policies, especially moves towards nine years' provision of education and the development of mass media in Tibetan, have improved the situation. There are currently 868 schools in Qinghai Province providing Tibetan language education to more than 540,000 students (Qinghai Provincial Education Bureau, 2011), who now can be taught in Tibetan from elementary school through university. The provincial government laid stress on the development of the Tibetan language and mandated its use in schools. Students could sit a paper on the Tibetan language for the high-stakes national university entrance examination, and could

answer the papers for other subjects in Tibetan (Mackerras, 1994). Textbooks were published in Tibetan for subjects such as Mathematics, English, Physics and Chemistry. However, with demographic and economic changes since the late 1970s, the use of Tibetan as the medium of instruction has been complemented by another model which uses Chinese as the medium of instruction, with Tibetan being taught as a subject in its own right. These two models could be found operating either in separate schools or within the same school according to local needs. For instance, schools in Huangnan, Hainan, and Guoluo autonomous prefectures tend to use the Tibetan model; Yushu and Haibei prefectures have adopted the Chinese model. A few schools in Hainan Autonomous Prefecture offer two streams, one using Tibetan as the medium of instruction, the other using Chinese (Ma & Renzeng, 2015). Overall, the Chinese model is becoming more popular as the Han population continues to grow, and the value of Chinese for the economic and social opportunities it affords becomes increasingly recognized by the Tibetans.

Chinese (comprising Putonghua, based on the Beijing dialect, as the spoken form and Standard Written Chinese) has been strongly promoted in schools across the country since the large-scale curriculum reforms of 1985. Chinese represents “the language of power and access to economic well-being” (Tsung & Cruickshank, 2009, p. 550) and is therefore desirable for ethnic minority groups, who often live in the poorer regions of the country and who wish to improve their living standards through engagement with mainstream society. On the other hand, the Chinese language could also be perceived as a threat to Tibetan language and culture unless the two languages can be accommodated harmoniously.

The provision of English in the curriculum in Tibetan minority schools accelerated from 2002. A number of elementary schools in Huangnan Prefecture introduced English from Grade Three, with two classroom hours a week. However, problems of teacher recruitment has meant that English is customarily scheduled from Grade Five onwards in most ethnic minority schools, with an allocation of four classroom hours a week. There is no formal requirement for English scores to be incorporated into the National Entrance Examination for colleges or universities, though in practice English examination results tend to be taken into account if the student attains a score of over 60 points. Hence, English is part of the formal education system in Tibetan minority schools, but it is not the high-stakes examination subject that it is elsewhere in China.

The Rationale for the Program

In recent years, a series of innovations in Qinghai has focused on raising the quality of education provision. Tibetan minority schools have undergone large-scale renovations of their teaching buildings and facilities. However, this development of the infrastructure has not been matched by enhanced teacher quality. At the heart of the problem is the severe shortage of teachers who are competent in both Tibetan and Chinese (not to mention English) and schools struggle to provide a bilingual

environment for students. To address this deficit, measures have been taken by the provincial government to provide professional development for teachers and school principals. Local universities and prestigious universities in south China were mobilized to assist. One of the initiatives—described in this case study—was the design of a new program to enhance teachers' capacity to deliver bilingual and trilingual teaching in the schools. This program supports the trend of schools using Chinese as the medium of instruction in local schools, while developing students' competence in Tibetan by teaching the language as a separate subject in the curriculum.

The Plan and Implementation

In 2007, the provincial government promulgated a plan for the development of trilingual teachers in elementary and secondary Tibetan schools. According to the plan, Qinghai Normal University and Qinghai University for Nationalities were given the responsibility of improving the proficiency of Tibetan, Chinese and English teachers. Principals and other senior staff in Tibetan schools were to be the first trainees in the training program, followed by subject specialists in the three languages. In this chapter, a 20-day professional development program for junior high school teachers of English run by the Qinghai University for Nationalities School of Foreign Languages is presented and discussed.

When tasked by the provincial government to run this program, the senior leaders of the university attached great importance to its success and took a hands-on approach to the design of the course and the selection of staff. Training courses and team-building activities were organized in order for the selected lecturers to become familiar with the program. The curriculum underwent four iterations before it was approved and implemented. Consultations were conducted with Tibetan schools and other key stakeholders. It was agreed that a purely theoretical program would lack relevance, so the approach adopted in the curriculum was to view the teaching and learning of English from the perspective of junior high school English teachers and students. Theoretical knowledge would be blended with contextualized practical skills and enlarging the participants' linguistic competence. Contents included topics such as analyzing teaching materials; pedagogical strategies to maximize student learning; effective classroom interaction; lesson planning and evaluation; assessment; and student motivation. The university hired two foreign teachers with considerable teaching experience, a veteran IELTS trainer, plus two young teachers who had studied abroad.

The initial lectures introduced the national policy on English education, with particular attention to the development of education in remote ethnic minority areas. Then, after consulting the participants, it was found that their greatest difficulties lay in figuring out how to teach English in an effective way. In response, the lecturers fine-tuned their courses. The participants were instructed to observe how the instructors' designed their lesson plans and how they created resources for assessment. One of

the foreign teachers taught the students English and then explored with them the pedagogy she had used and possible alternatives. A blackboard and chalk were used in classes in order to create a realistic classroom setting, as most Tibetan areas do not possess hi-tech teaching multimedia or networking facilities. The participants realized that even if they lack hi-tech facilities, they could still give a good lesson. The key is planning the learning and delivering classes in a lively manner. With these models in hand, the participants made their own plans and resources, and shared them with classmates and lecturers for critical review and constructive feedback. In this way, the participants came to understand that there is no one-size-fits-all approach.

Subsequently, when the teacher and participants discussed English teaching methods, they identified grammar as the trickiest part. It was generally agreed that high school students do not want to listen to teachers talk about teaching grammar rules, as the teacher-student interaction would be negatively affected. The lecturers helped the participants to recognize the importance of effective teaching methods and encouraged them to share their own grammar coursework materials. There was an emphasis on working together to solve pedagogical challenges. All the products from lectures and participants were filmed and burned onto CDs and shared for future reference and use.

As the spoken English of many pastoral teachers tends to be influenced by their native language in terms of accent, the foreign teachers provided pronunciation lessons. Moreover, to improve the participants' spoken English, optional oral courses were offered, although only fifty participants enrolled. A grammar course was also set up for teachers of junior high school English. Participants learnt how to assess the grammatical difficulties of their students. In addition, the senior IELTS language teacher trainers taught English writing courses and, although only six hours were allocated to these classes, they were found to be of great help in developing the writing ability of the candidates.

The program organizers faced a problem when it came to assessment of the participants. It was soon obvious that, despite meticulous planning, the course needed to be implemented flexibly. However, the provincial government expected rigorous testing of the participants. A balance was struck, whereby the assessment components were designed in a flexible manner to reflect participants' learning and the program intended outcomes. Participants were assessed through coursework, lesson plans, materials design and closed-book examinations.

At the end of the program, the participants were invited to evaluate their experiences. Several felt that there was still a disconnection between classes provided by the lecturers and the reality of classrooms in the rural areas. This points to a weakness in the program design, in that the participants were assembled in the capital city, making situated learning more difficult to achieve. However, organizing more localized professional development presents logistical and financial challenges that cannot be overcome in the short term. For the time being, efforts will be devoted to fine-tune the program content and to create a critical mass of trained teachers to

spearhead the development of better quality bilingual education in the rural Tibetan areas of Qinghai.

CONCLUSION

The two initiatives presented in the chapter represent different emphases in the promotion of a common cause, namely trilingualism, in western regions of China. The Yunnan project demonstrates the value of the students' first language (in this case Zhuang), as opposed to the use of their second language (Mandarin Chinese), in learning their third language (English). The Qinghai project shows how professional development can assist teachers in ethnic minority regions to strengthen the learning of English, even in areas where the language has little traction in daily life. Taken together, the findings offer hope that indigenous solutions can resolve some of the problems in developing trilingualism that have appeared in other minority areas—a shortage of suitable teachers. Reports from elsewhere (see, for example, Feng & Adamson, 2015) show that schools in ethnic minority regions have tended to recruit Han Chinese teachers of English because of the dearth of trained teachers who can teach English through the minority language. Given the power of the students' first language for effective learning, the development of a cadre of ethnic minority teachers can lead to the strengthening of English, with all its concomitant advantages and opportunities for further education, employment and other life chances. These projects promise progress towards greater social equity and empowerment for the ethnic minority groups.

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Views expressed are those of the authors.

NOTES

- ¹ Data provided in an interview with Zhetu District government officials in 2006.
- ² For example, those Zhuang-speaking students from the Zhetu District Middle School that tested well enough to continue on to high school in 2009 had an average score of over 95 for the math entry exam, but less than 50 for the English exam.
- ³ Reiterated in a recent government white paper, entitled "Human Rights in China," published 8 October, 2008. Section VII. "Guarantee of the Rights of the Minority Nationality." Available online through the People's Daily at: <http://english.people.com.cn/90840/92283/92284/6278548.html> According to 2004 statistics from the Ministry of Education of the People's Republic of China, ethnic minority students accounted for 7.78% of the total middle and high school students and only 5.7% of tertiary level students, although minority nationalities account for 9.2% of the national population. (Source: <http://www.moe.edu.cn/edoas/website18/54/info12054.htm>)

- ⁴ Although a true immersion learning environment may be the ideal for these students to master English as a second language, currently in the rural high schools in which fluent English speakers are few and the number of other core subjects students study are many, such is not possible. Therefore, as a second best solution, use of the mother tongue can help students more rapidly and thoroughly retain the English vocabulary necessary to test well on the standard English examinations.
- ⁵ The project translated and recorded portions of the 2010 seventh grade fall semester English textbook and the 2011 fall and spring semester textbooks. These textbooks are edited by the Ren'ai Educational Institute in Beijing. (《英语七年级上/下册》,北京市仁爱教育研究所, 编著, 北京教育出版社, 2010、2011年。)
- ⁶ Compliance was supervised by the English teachers, as well as one of the researchers, who was on site about 40% of the weeks during the testing phase. As one can expect in a situation in which one has hundreds of adolescents studying a foreign language at 6:30 in the morning with a student teacher ratio of sometimes one hundred to one, there were various aberrations in the listening period procedures, and the methodology was complicated by occasions when other activities, such as teachers drilling the students through rote memorization, rather than meaning-based instruction, imposed upon the study hall periods. Nonetheless, these aberrations affected the control groups to the same degree and frequency as the test groups and therefore the comparison of the independent variable, being the language of the tutorial recordings, remains valid.
- ⁷ A number of students dropped out of seventh grade during the course of both testing phases, as is common at rural high schools in China. Some other students who were absent for large sections of the semester or who were absent the day of the assessments were not included in the comparison. In the first phase, our test groups were larger than our control groups due to the need to have seats available in the control group classroom for those non Zhuang-speaking students who needed to listen to the Chinese and English recordings during this time, though their scores were not considered in the analysis. During the second phase more classrooms were used such that the total number of eligible test group subjects was equal to that of control group subjects.
- ⁸ The overall lower scores on the final mark (grade) as compared to the researchers' assessments is due to the fact that the final grade includes assessments of listening ability, grammar, reading and writing, whereas the semester assessment only tested vocabulary recognition. Though many of the students apparently did more poorly on these other English skills than they did in recognizing vocabulary, it is significant that the relative difference in marks between the control and test groups was similar to the difference between these group's vocabulary assessments, indicating that the variable may prove helpful for improving students performance in some of these other skills as well as in retaining and recognizing vocabulary.
- ⁹ Both groups had only a single student achieve over 80.
- ¹⁰ In theory, attendance through ninth grade is mandatory, but this is not enforced and many rural minority students, both male and female do not continue formal schooling after sixth grade, with many more dropping out permanently in middle school.
- ¹¹ We lack sufficient evidence to answer the question of why the degrees to which female students outperformed male students were greater on our assessments than on the final course marks as assigned by English teachers. Given that our assessments were graded without consideration of gender, and were merely multiple choice matching of English vocabulary items with Chinese glosses, we feel like we can rule out gender-bias against male students on our own assessments.
- ¹² Male students in the test group scored 17% higher on average on both of the English vocabulary assessments than did male students in the control group, whereas female students in the test group scored only around 8% higher than those in the control group.

REFERENCES

- Adamson, B., & Feng, A. W. (2014). Models for trilingual education in the People's Republic of China. In D. Gorter, V. Zenotz, & J. Cenoz (Eds.), *Minority languages and multilingual education* (pp. 29–44). Dordrecht, The Netherlands: Springer.

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- Adamson, B., & Feng, A. W. (2015). Trilingualism in education: Models and challenges. In A. W. Feng & B. Adamson (Eds.), *Trilingualism in education in China: Models and challenges* (pp. 243–258). Dordrecht, The Netherlands: Springer.
- Adamson, B., Feng, A. W., Liu, Q., & Li, Q. (2013). Ethnic minorities and trilingual education policies. In D. J. Besharov & K. Baehler (Eds.), *Chinese social policy in a time of transition* (pp. 180–195). Oxford, England: Oxford University Press.
- Cummins, J. (1984). *Bilingualism and special education: Issues in assessment and pedagogy*. Clevedon, England: Multilingual Matters.
- Feng, A. W., & Adamson, B. (Eds.). (2015). *Trilingualism in education in China: Models and challenges*. Dordrecht, The Netherlands: Springer.
- Finifrock, J. (2010). English as a third language in rural China: Lessons from the Zaidang Kam-Mandarin bilingual education project. *Diaspora, Indigenous, and Minority Education*, 4(1), 33–46.
- Finifrock, J. E., & Schilken, D. (2015). Emerging trilingualism among the Dong minority in Guizhou Province. In A. W. Feng & B. Adamson (Eds.), *Trilingualism in education in China: Models and challenges* (pp. 199–221). Dordrecht, The Netherlands: Springer.
- Ma, F., & Renzeng (2015). Ethnolinguistic vitality, language attitudes and language education in Tibetan schools in Qinghai. In A. W. Feng & B. Adamson (Eds.), *Trilingualism in education in China: Models and challenges* (pp. 103–115). Dordrecht, The Netherlands: Springer.
- Mackerras, C. (1994). *China's minorities: Integration and modernisation in the twentieth century*. Hong Kong, China: Oxford University Press.
- People's Daily. 2011. *China has over 2.9 million ethnic minority cadres: Report*. Retrieved July 3, 2012, from <http://english.people.com.cn/90001/90776/90785/7439871.html>
- Qinghai Provincial Education Bureau. (2011). *Annual report on bilingual schools*. Xining, China: Author. [in Chinese]
- Sunuodula, M., & Feng, A. W. (2011). English language education for the linguistic minorities: The case of Uyghurs. In A. W. Feng (Ed.), *English language education across greater China* (pp. 260–183). Clevedon, England: Multilingual Matters.
- Tsung, L. T. H., & Cruickshank, K. (2009). Mother tongue and bilingual minority education in China. *International Journal of Bilingual Education and Bilingualism*, 12, 549–563.
- Wang, M. F., & Johnson, E. (2008). *Zhuang cultural and linguistic heritage*. Kunming, China: Yunnan Nationalities Publishing House.
- Xiao, X. (2003). An investigation of Yi-English bilingual teaching at the Xichang school for nationalities. *Minzu Jiaoyu Yanjiu*, 14(2), 58–65.
- Zhang, Z. A., Li, G. H., & Wen, L. T. (2015). Trilingual education in China's Korean communities. In A.W. Feng & B. Adamson (Eds.), *Trilingualism in education in China: Models and challenges* (pp. 47–64). Dordrecht, The Netherlands: Springer.
- Zhou, M. (2000). Language policy and illiteracy in ethnic minority communities in China. *Journal of Multilingual and Multicultural Development*, 21(2), 129–148.
- Zhou, M. (2001). The politics of bilingual education and educational levels in ethnic minority communities in China. *International Journal of Bilingual Education and Bilingualism*, 4(2), 125–149.

Eric Johnson
SIL International, USA

Ma Fu
Qinghai University for Nationalities, Xining, China

Bob Adamson
Hong Kong Institute of Education, Hong Kong