TAIWANESE JUNIOR HIGH SCHOOL ENGLISH TEACHERS’ PERCEPTIONS OF THE WASHBACK EFFECT OF THE BASIC COMPETENCE TEST IN ENGLISH

DISSERTATION

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The phenomenon of how external tests influence teaching and learning is commonly described as “washback” in language instruction. Literature indicates that testing washback is a complex concept that becomes even more complex under a variety of interpretations of the washback phenomenon on teaching and learning. Some studies conclude that no simple washback effect occurs (Alderson and Hamp-Lyons, 1996; Watanabe, 1996), whereas others find powerful determiners of language testing toward classroom teaching (Hughes, 1988; Khaniya, 1990; Herman and Golan, 1991).

The purpose of this study was to investigate how English teachers in Taiwan junior high schools perceived the impact of a reformed public examination, called the Basic Competency Test (BCT), on their curricular planning and instruction. This study was expected to add to the existing literature on testing washback in an English as a foreign language context.

The relational research method was used in this research. The target population was Taiwan junior high school English teachers. The survey method (a quantitative method) and focus group interviews (a qualitative method) were used to collect data. Data were analyzed in two phases. Bivariate correlation and multiple regression analyses were used to analyze the quantitative data. Content analysis using a note-based technique interpreted the qualitative data.
Findings from this study indicate that the BCT has an influential impact on teachers’ curricular planning and instruction. However, such a washback influence on teachers’ teaching attitudes is quite superficial; that is, the washback may influence teachers what to teach but not how to teach. The reason for why it influences teaching contents is because of the issuance of new teaching materials for nation-wide junior high schools. Due to the lack of in-service teacher training, teachers lack knowledge of how to change their teaching methods in order to align with the new curriculum. Based upon the findings, this study recommends: 1) provide teachers with extensive professional development opportunities, 2) change the “academic watch” policy, 3) practice mix-ability grouping instead of achievement grouping to group students, and 4) integrate assessment into classroom evaluation.
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CHAPTER 1

INTRODUCTION

The term “public examination” is synonymous with an external examination or a test that is administered by external agencies or forces to evaluate learning products or results with a decisive consequence or influence on test-takers (Alderson, 1986; Shohamy, 1992). Public examinations, such as the joint entrance examinations in Taiwan, are often regarded not only as instruments used to select students but also as a means to control a school system, especially when the educational system is driven by tests or examinations. Such type of external tests is commonly believed to have an impact on teaching and learning.

The studies, comparing secondary school examinations in eight countries by Eckstein and Noah (1993a), further illustrate how external examinations influence the degree and depth of teaching and learning.

They (students in Mainland China) have had little incentive to study anything that will not be on the examination paper. There is no time in their classes to explore questions that are unlikely to come up in the tests. Classes are devoted to lectures and recitations, and homework consists of reviewing notes and textbook (p. 53).

The phenomenon of how external tests influence teaching and learning is commonly described as “backwash” in general education or as “washback” in language instruction. Although a great body of studies related to the effects of public examinations, as well as the
relationships between public examinations and language instruction, has been carried out in recent decades (e.g., Alderson, 1986; Smith, 1991b; Shohamy, 1993), no definitive influence has been reported (e.g., Cheng, 1995; Watanabe, 1996a and 1996b). Literature has indicated that testing washback is a complex concept that becomes even more complex under a variety of interpretations of the washback phenomenon on teaching and learning. Some studies conclude that no simple washback effect occurs (Alderson and Hamp-Lyons, 1996; Watanabe, 1996b), whereas others find powerful determiners of language testing toward classroom teaching, such as arrangement of time, curricular scope and sequence, and choices of teaching materials (e.g., Hughes, 1988; Khaniya, 1990; Herman and Golan, 1991).

In Taiwan, with its measurement-led system, testing impact is expected whenever public language examinations are introduced. However, whether the public examinations may hinder or promote innovation needs to be examined empirically. This is largely due to a limited body of research that studies the washback impact of public examinations on teaching and learning so that the results of the research offer insufficient evidence to explain whether and how washback occurs.

Cheng (1999) in her study pointed out that a certain gap exists between decision making agencies (e.g., examinations authority) and intervening agencies (e.g., normal universities which provide in-service and pre-service teachers education programs) regarding how the curriculum standards and examination objectives are interpreted. In addition, how intervening agencies and implementing agencies (e.g., schools including administration and teachers) perceive examination objectives forms another gap. Figure 1.1 illustrates the gaps among different levels of educational parties in Taiwan regarding
how curriculum standards and examination objectives might be interpreted. Findings from this study are expected to contribute to bridge the gaps.

Figure 1.1: Gaps among the educational parties in Taiwan regarding the interpretation of the innovated curriculum (sources from the Ministry of Education in Taiwan and Cheng, 1999)
The Ministry of Education in Taiwan innovated junior high school curriculum standards in English education in 1994. New textbooks were issued in 1997 and a reformed entrance examination, called the Basic Competency Test (BCT), started to replace the previous Secondary School Joint Entrance Examinations (SSJEE) in 2001 in order to meet the new curriculum objectives. This study was designed to examine the nature and scope of the impact of the BCT on junior high school English teaching in order to provide information to relative educational parties in Taiwan about how the reformed entrance examination is perceived by classroom teachers. Before proceeding to the main research topic, a description of Taiwan educational system, English education and joint entrance examinations in junior high school is provided in the following text to help the reader understand the research context.

Research Context

Education in Taiwan

In general, the educational system in Taiwan is comprised of seven levels. (See Figure 1.2) The first level is preschool or kindergarten. The compulsory education program consists of six-year elementary school education and three-year junior high school education. Once compulsory education has been completed, a distinction is made between academic education and vocational education systems. Most of junior high school graduates have to pass the entrance examination in order to enter secondary schools. Followed by secondary education is four- to seven-year college or university. The last level is graduate schools, which consists of a master program and a doctoral program. The
Ministry of Education is responsible for formulating education policy, as well as for overseeing the operations of all national schools and colleges, national social education organizations and private universities and colleges.

Figure 1.2: Taiwan educational system (sources from the Ministry of Education in Taiwan, 2001)
**English Education in Taiwan**

In Taiwan, English is taught as a foreign language (EFL) and is practiced within a context-restricted environment, in which the determiners of language learning phenomenon depend on classroom activities, determined by the classroom instructor. The major difference between EFL and ESL (English taught as a second language) is that in an ESL context, English is taught in an educational situation where English is the partial or universal medium of instruction for other subjects, while in an EFL context, the language is taught in an educational situation where instruction in other subjects is not normally given in English (Prator, 1991).

Previously, English education in Taiwan formally started from junior high schools. Starting from 2001, English teaching starts from the 5th grade of elementary schools. According to the Junior High School Curriculum Standards in English Education, issued in 1994 by the Ministry of Education in Taiwan, the average instruction time is three hours per week for both the first and second years of junior high schools, and four hours per week for the third year. However, many teachers may increase instruction time because expectations of high quality English education are manifest in Taiwan. All junior high schools, with very few exceptions, follow the curriculum standards. The Ministry of Education compiles, develops and publishes textbooks and teaching materials, for nationwide public junior high schools.

Traditional English education placed an emphasis on reading skills. Historically, the reason for focusing English education on reading was to cultivate students' translation abilities in order to help students read and translate materials written in English. The previous curriculum, thus, was aimed to promote students' grammar knowledge in reading.
and translation. Most junior high school English teachers, therefore, implemented the grammar translation teaching method in their classrooms to meet the expectations of the national curriculum.

In 1994, the Ministry of Education began working actively in the area of education reform. One of the main areas where promotional work is being undertaken was the reform of curricula and teaching materials. Owing to the convenience of transportation and a revolution in technology, contact by teachers and students with English-speaking countries increased. The old curriculum in junior high school English education, developed in 1985, had been under serious criticism for not providing an adequate level of basic oral and aural communication competences for junior high school students after they had studied English for three years. The Ministry of Education, thus, undertook the revision of the old curriculum and the production of new textbooks. The revised curriculum for junior high school English education was introduced in 1994, following by the issuance of the new textbooks to be used by all junior high schools in 1997. The major difference in the revised curriculum for junior high school English education is that more emphasis is placed on communicative competence.

Taiwan Secondary School Entrance Examinations

In Taiwan, junior high school graduates have to take entrance examinations, with very few exceptions, in order to enter secondary schools. The previous general examinations were administered in summer. Under the supervision of the Ministry of Education, each county administered its district joint examinations with the same administration dates and similar examination formats as those administered by the other districts. According to the
Ministry of Education (1999), over 94% of the junior high school graduates were admitted into secondary schools. In spite of a large number of secondary schools and a high admission rate to secondary schools, a vigorous competition still existed because most students expected to enter high-ranking schools under a widespread belief that going to the high-ranking schools improved the probability of passing the Joint Matriculation Examinations or obtaining better jobs after graduation. Some of those who failed to gain an entry into their preferred secondary school even studied another year in order to retake the SSJEE. The consequence of such competition produced high stress and anxiety on the junior high school students, especially when the time to take the examinations was approaching.

Question formats regarding the previous SSJEE in English mainly included cloze items, multiple choice items, short-answer questions, and translations, with an objective to test students’ grammar competence instead of communicative competence so that students’ oral and aural abilities were entirely neglected in the examinations. Although a more communication-oriented curriculum in junior high school English education being introduced by the Ministry of Education in 1994, the SSJEE in English held from 1994 to 2000 had not shifted the focus from testing students' grammar knowledge toward communicative competences.

In 2001, the Ministry of Education in Taiwan promulgated multiple schemes for junior high school graduates to enter secondary schools. (See Figure 1.3) In line with the implementation of these schemes, the Ministry of Education draws up implementation policies on the recommendation and selection for entering secondary schools. Junior high school graduates can be assigned to secondary schools via special selections (based upon
the students’ special talents), recommendations (based upon students’ achievement in junior high school), and the entrance test score (based upon the BCT). This is different from the single scheme policy used in the previous case, in which junior high school graduates were assigned to secondary schools simply based upon their test score from the SSJEE.
Figure 1.3: Multiple schemes for junior high school graduates to enter secondary schools (sources from the Ministry of Education in Taiwan, 2001)
The reformed entrance examinations, the BCT, started to replace the SSJEE in 2001. Students who entered junior high schools in 1998 sat in for the BCT. The major differences between the BCT and the SSJEE are: 1) more chances exist for students to succeed from examinations because they can have two chances each year to take the examinations and produce a better result to apply for their target secondary schools, and 2) a reduction in number of test subjects are provided in order to mitigate students’ burden in preparing for the entrance examinations. The BCT test format in English is multiple choices with the objective on testing students' contextual reading competence.

Statement of Problem

In the measurement-led instruction, many language researchers and educators in Taiwan have assumed various levels of washback impact on English instruction. Despite numerous studies regarding the testing impact on English as a foreign language teaching and learning being of different contexts, empirical research is still lacking on the washback phenomenon of public examinations on junior high school English teaching, particularly in Taiwan. Thus, this study was designed to investigate the nature and scope of the BCT washback in English education in Taiwan junior high schools based upon teachers' perceptions.
Significance of the Study

The purpose of this study was to investigate how English teachers in Taiwan junior high schools perceived the impact of the BCT on their curricular planning and instruction. The general educational literature in the foreign language testing field indicates six main dimensions influenced by washback that most teachers perceive. The six dimensions are: 1) syllabus design, 2) methods of teaching, 3) contents, 4) classroom activities or time arrangement, 5) instructional materials, and 6) classroom assessment. This study was thus designed to investigate how the English teachers in Taiwan junior high school perceived the impact of the BCT on their curriculum in these six domains. The teachers’ perceptions of the BCT were investigated with an aim to explain how their goals and actions regarding their curricular planning and instruction were influenced by the impact of the BCT.

Furthermore, this study was to determine the relationships among how the impact of the BCT was perceived and: 1) selected teacher characteristics and 2) selected school characteristics. More importantly, the findings should provide important information to lead the involved educational parties in Taiwan English education to an improvement of the BCT in English tests.

Finally, this study was designed to combine quantitative (survey) and qualitative (focus group interviews) research methods. By combining qualitative and quantitative methods, this study had a potential to explain and predict various aspects of washback of the BCT in Taiwan junior high school English instruction.
Research Questions and Hypotheses

Research Questions

In order to facilitate the investigation regarding how Taiwan junior high school English teachers perceived the impact of the BCT on their curricular planning and instruction, the researcher formulated the following research questions.

1. What are the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction (the dependent variable)?
2. What are the relationships among the main independent variables (teachers' perceived awareness of the BCT, teaching experience, educational background, perceived importance of the BCT, gender, participation in in-service teacher education programs and perceived professionalism in teaching) and the dependent variable?
3. What are the relationships among the rival independent variables (school type, school location, grade, class size, perceived students' learning attitudes, and perceived external pressure in teaching) and the dependent variable?
4. What is (are) the intervening variable(s) of each of the main independent variables that influenced the dependent variable?
5. How much of the variance in the dependent variable can be explained by each of the independent variables?
Sub-questions and Research Hypotheses

The following sub-questions and hypotheses were established in order to answer the research questions and, thus, fulfill the research purpose.

1. Relationships between each of the main independent variables and the dependent variable

1-1. Is there a relationship between perceived awareness of the BCT and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

1-2. Is there a relationship between perceived importance of the BCT and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

1-3. Is there a relationship between teaching experience and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

1-4. Is there a relationship between educational background and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

1-5. Is there a relationship between professionalism in teaching and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

1-6. Is there a relationship between teachers’ gender and their perceptions of the impact of the BCT on their curricular planning and instruction?

1-7. Is there a relationship between participation in in-service teacher education
programs and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

2. Relationships between each of the rival independent variables and the dependent variable

   2-1. Is there a relationship between school type and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

   2-2. Is there a relationship between school location and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

   2-3. Is there a relationship between grade and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

   2-4. Is there a relationship between class size and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

   2-5. Is there a relationship between perceived students' learning attitudes and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

   2-6. Is there a relationship between perceived external pressure in teaching and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

3. Relationships among each of the main independent variables and the rival independent variables

   3-1. Is there a relationship among teaching experience and the rival independent variables?

   3-2. Is there a relationship among educational background and the rival independent variables?
variables?

3-3. Is there a relationship among perceived awareness of the BCT and the rival independent variables?

3-4. Is there a relationship among perceived importance of the BCT and the rival independent variables?

3-5. Is there a relationship among perceived professionalism in teaching and the rival independent variables?

3-6. Is there a relationship among gender in teaching and the rival independent variables?

3-7. Is there a relationship among participation in in-service teacher education programs and the rival independent variables?

4. Relationships among the main independent variables and the dependent variable with holding the rival independent variables constant

4-1. If the rival independent variables are statistically controlled, there will be no relationship among the main independent variables and the dependent variable.

5. Relationships among the independent variables and the dependent variable

5-1. The variance of dependent variable explained by the linear combination of the independent variables will be zero.

5-2. Each of the independent variables will not contribute significantly to the variance of the dependent variable when the other independent variables are controlled.
Definition of Terms

The key terms are operationally defined in the following in order to establish a consistent and common meaning for the terms used in this study.

Awareness of the BCT

In this study, awareness of the BCT refers to the investigated teachers' understanding of the policy and formats, contents, and/or skills to be tested on the BCT. Teachers' perceived awareness of the BCT was measured by summing the total score of the items related to this domain on the survey questionnaire (item 52-55) with a six-point Likert-type scale.

Educational Background

Teacher education programs, in second language teaching, typically consist of a knowledge base drawn from linguistics and language learning theory, and a practical component based upon language teaching methodology and opportunity for practice teaching (Richards and Unmans, 1999). In Taiwan, a B.A. program typically consists of a practice component based upon language teaching methodology and opportunity for practice teaching. A postgraduate program usually consists of a knowledge base drawn from linguistic and language learning theory. Educational background, in this study, refers to the highest degree that the teacher had received, e.g., B.A., M.A. or others.
External Pressure in Teaching

Herman and Golan (1991 and 1993) indicated that teachers in schools with increasing test scores felt more pressure to improve their students' test scores from different external sources than teachers in schools with stable or decreasing scores did. The external sources included their principals, school administrators, other teacher colleagues, parents, the community, and/or the media. In this study, any of the external forces, which existed within society, education and schools, that influenced teachers' curricular planning and instruction, was examined. Teachers' perceived external pressure in teaching was measured by summating the total score of the items related to this domain on the survey questionnaire (item 48-51, and 65-66) with a six-point Likert-type scale.

Gender

The term "gender" is usually used to describe those characteristics of women and men that are socially constructed, in contrast to those that are biologically determined. In this study, gender was defined as "male" or "female" teachers.

Grade

In Taiwan, junior high schools are usually consisted of three grade levels. The third-year junior high school students are closer to take the BCT. Grade, in this study, refers to whether the teacher was teaching the third-year students or not in order to examine whether grade level influenced the teacher's curricular planning and instruction.
Importance of the BCT

The level of the importance of the test refers to the extent to which the test results are used to make important decisions that immediately and directly affect students (Madaus, 1985, p. 7). The perceived importance of the BCT, in this study, was limited to examining how teachers perceived the level of the status of the BCT that affected their instructional decisions. The perceived importance of the BCT was measured by summing the total score of the items related to this domain on the survey questionnaire (item 56-64) with a six-point Likert-type scale.

In-service Teacher Education Program

In this study, in-service teacher education program refers to the frequency that teachers attended in-service programs related to their professional development within the recent five years to update their teaching knowledge and skills.

Professionalism in Teaching

Alderson and Wall (1993) explained that teachers' professionalism in teaching was associated with teachers' fear and the associated guilt, shame or embarrassment of poor results from their students' performance in public examinations. In this study, how Taiwan junior high school English teachers perceived their occupational performance via their students' performance on the BCT was examined. Teachers' perceived professionalism in teaching was measured by summing the total score of the items related to this domain on the survey questionnaire (item 42, 44-47 and 67) with a six-point Likert-type scale.
School Type and Location

Wilson and Corbett (1991) indicated district variation or community demographics, such as the size and location of the community (in rural or metropolitan areas) where the schools were located, contributed to the explanatory power of testing effects. In this study, school type referred to whether the school that the teacher was currently teaching in was public or private, whereas school location meant whether the school that the teacher was currently teaching in was located in an urban or a rural area.

Students' Learning Attitudes

In Taiwan, tests are commonly assumed to bring about some change in motivation and thus in behavior associated with learning. Students, particularly those with high orientation toward success or toward avoidance of failure in the exam, are more likely to expect their teachers to cover what will be tested. This might thus bring some change in behavior associated with the teacher's instructional plan and practice. In this study, how different students’ learning attitudes influenced what and how their teachers taught was examined. Students' learning attitudes perceived by the teachers were measured by summating the total score of the items related to this domain on the survey questionnaire (item 39-41 and 43) with a six-point Likert-type scale.

Teachers’ Perceptions of English Teaching

“Perception” is constitutively defined as “the ability to perceive or know through the senses.” Pajares (1992) indicated the similar process while constructing perceptions, beliefs, attitudes, values, judgments, opinions, perspectives, and theories. Teachers’
teaching perceptions, usually established gradually, may be derived from different sources, such as their education background, teaching experience, or external pressure (e.g., education system). However, perceptions form a great influence on 1) teachers’ goals, values, beliefs in relation to the content and the process of teaching, 2) their understanding of the systems in which they work and their roles within it, and 3) their decision making and actions (Richard and Lockhart, 1994).

In this study, junior high school teachers’ perceptions of English teaching were delimited within their perceptions of English instruction in six dimensions: syllabus design, classroom activities, teaching methods, teaching materials, teaching contents, and classroom assessment. Teachers' perceptions were measured by summatting the total score of the items related to the six dimensions on the survey questionnaire (item 1-38) with a six-point Likert-type scale.

Teaching Experience

In this study, teaching experience was delimited as the length of time that the teacher had been teaching English in Taiwan junior high schools.

Washback

In the general education literature, the favored term to describe the testing phenomenon is backwash. There seems to be a preference for the term of washback, however, in language education (Andrews, 1994). Hughes (1989) defined washback as “the effect of testing upon teaching and learning.” Messick (1996) further expanded this definition as he referred washback as the influence of testing on teaching and learning due
to the introduction and use of the test. Valette (1994) stated "washback occurs when it is the testing instrument rather than the statement of desired learner outcomes that determines the nature of the curriculum and the course of instruction" (p. 10). In summation, it is the way in which a test accidentally influences teaching and learning in a backward direction.

In this study, washback was defined as the introduction of the reformed SSJEE in Taiwan, called the BCT, that brought about the changes in junior high school English teaching in the six dimensions: classroom syllabi, activities, contents, teaching methods, teaching materials, and classroom assessment.

Limitations of the Study

This study concentrated on investigating how the junior high school teachers in Taiwan perceived the impact of the BCT on their curricular planning and instruction in six dimensions—syllabi, teaching materials, teaching methods, contents, activities, and classroom assessment. Since the population which involved in the investigation was confined to be English teachers in junior high schools in Taiwan, this study had no attempt to investigate washback impact experimentally caused by a different type of examination or in a different context. In addition, this study focused on the explanation how the BCT influenced English teaching in Taiwan junior high schools. Data collected in this study were only adequate for describing perceptions of washback impact of the BCT on Taiwan junior high school English teaching and how it could be explained and predicted by selected teachers and school characteristics. Thus, the results would be inappropriate to be generalized to other contexts or other examinations. Moreover, the findings in the
conclusion were based on teachers' opinions, further empirical data (e.g., classroom observations), especially from longitudinal studies, should be eventually collected and analyzed to add up insight into the nature of this phenomenon, i.e., the BCT washback. Finally, the response rate should be improved if the researcher is on-site collecting data.

Organization of the Dissertation

This dissertation basically is divided into five chapters. The first chapter addresses the introduction, statement of problem, significance of the study, research questions and hypotheses, definition of terms, and limitations of the study. A review of related literature that provides the reader with background knowledge is done in the second chapter. Chapter three delineates the sampling procedure, development of instruments, including the procedures for validating the instruments and building reliability of the instruments, data collection procedures, and analysis of data. Chapter four is a report of findings. The last chapter is to summarize the research design, answer the research questions, discuss the findings and conclusions, provide theoretical implications for the study, and finally make recommendations for further research.
CHAPTER 2

LITERATURE REVIEW

Research in second and foreign language education has focused on the development of conceptual theories and pedagogy with an aim to enhance the effectiveness of language teaching and learning. The consequence of language testing remains indispensable to an entire instruction process. As Khaniya (1990) pointed out, good examinations were useful and desirable. Education would be poorer and much less effective without examinations.

Appropriate use of tests can promote teaching and learning. However, recent research has indicated that tests also impact different educational parties, particularly teachers and students in different ways. Shohamy (1996), in her studies of Arabic as a second language and English as a foreign language for the modified Israeli examinations, indicated “the results obtained from tests can have serious consequences for individuals as well as for programs, since many crucial decisions are made on the basis of test results” (p. 299).

Tests are usually used as a part of teaching process in order to provide diagnosis of learning results. However, external tests have exerted an influence on teachers and students with an associated impact on what happens in classrooms (Davies, 1968; Alderson, 1986; Morrow, 1986; Pearson, 1988; Hughes, 1989; Morris, 1990). A phenomenon that testing influences or dominates teaching and learning is denoted as “washback” or “backwash.”
Not until four decades ago did washback phenomenon start to earn concerns from both the theoreticians and practitioners in the field of applied linguistics. In spite of a great body of research regarding testing washback having been done (Wiseman, 1961; Davies, 1968; Pilliner, 1973; Davies, 1985; Alderson, 1986; Morrow, 1986; Pearson, 1988), no definitive agreement has been reached on whether washback exists or what its nature, its scope, and the extent to which it occurs is. This is partly because of the lack of sufficient empirical studies to explain the complex phenomenon; the other partial but important reason comes from the difficulties to develop a laboratory study with a high degree of control over variables leading to strong internal validity in the real world (Bailey, 1996).

This literature review will begin with a review of the debate associated with the washback impact of public examinations on teaching, particularly on second and foreign language education. This review will be followed by an essential review of alignment of curriculum and public examinations and then another review related to how teachers perceive the impact of public examinations on their curricular planning and instruction. The review will end with a discussion of the suggested intervening factors that are commonly associated with teachers’ perceptions of the impact of public examinations on their curricular planning and instruction.

Washback Impact of Public Examinations

Public examinations have assumed a prominent role in influencing the quality of education. Shohamy (1992), more explicitly, described impact of external tests as the "most powerful devices, capable of changing and prescribing the behavior of those who are affected by their results—that is, administrators, teachers, and students” (p. 513). She
further stated that external tests had often been used to impose new curricula, new textbooks, and new teaching methods by central agencies and decision makers who were aware of the authoritative power of the tests.

**Beneficial Washback**

A few researchers have pointed out that public examinations reinforce some behavior or attitude rather than bringing about otherwise unlikely behavior. Morrow (1986), who coined the term “washback validity” to denote the relationship between testing and teaching, claimed that in essence an examination of “washback validity” would take testing researchers into the classroom to observe the effect of their tests in action. Morrow asserted that direct language tests would arouse the most beneficial effect and thus argued that communicative tests should bring a positive and powerful impact to classroom.

"Systemic validity," introduced by Frederiksen and Collins (1989), presents another positive view about the beneficial effect from public examinations. The major concept of “systemic validity” is that a systematically valid test is able to induce in the education system curricular and instructional changes that will foster the development of the cognitive skills that the test is designed to measure. Evidence for “system validity” will be an improvement in those skills after the test has been in place within the educational system for a period of time.

The other term associated with positive washback is “curriculum alignment.” "Curriculum alignment" implies that the curriculum is modified according to test results in order to improve the quality of education (Linn, 1983; Madaus, 1988; Shepard, 1990, 1991, 1993; Andrews, 1994).
Thus, advocates who support for public examinations commonly argue that public examinations, first of all, set meaningful standards to which school districts, schools, teachers, and students can aspire. Second, data from public examinations can be used as feedback to improve classroom instruction. Third, public examinations promote accountability of school systems, schools, and teachers for students’ learning. Finally, public examinations can be used to enhance fast and broad changes within schools and thus to stimulate major educational reform by being coupled with incentives and sanctions (Herman & Golan, 1991). Pan (1983) supported the system of public examinations by saying that the entrance examination system in Taiwan “provides an equal standpoint for every student in the country with clearly stated evaluative criteria. With a special computerized evaluation design, no man-made interference can affect the result” (p. 23).

If the effects of public examinations are beneficial and encourage the whole range of desired changes, this consequence is associated with “positive washback.” Based upon these concepts, public examinations should be educationally beneficial when they can reinforce behavior and attitudes of the involved parties, such as teachers and students, to carry out changes that enhance and reward teaching and learning results.

**Harmful Washback**

While public examinations are thought by many to benefit education in a variety of ways, recent studies have raised questions about the validity of public examinations. Some researchers have had a suspicion about whether the use of public examinations on its own can improve the quality of education. Yang (1980), who disagreed that the quality of education could be improved by simply using public examinations, pinpointed three
negative influential impacts of the entrance examination system in Taiwan. First, the use of the entrance examination system hinders the flexibility necessary to accommodate individual differences. Second, competing with each other as encouraged by the entrance examination system directs learning toward selfishness rather than teamwork. Third, communicative skills are overlooked because they are not evaluated in the test so that the students’ are not motivated to practice these skills. Yang, thus, concluded the entrance examination system in Taiwan as the major barrier to English instruction, and as the cause of many other barriers of language instruction (cited in Cheng, 1985).

Some other researchers in their studies also concluded with a harmful effect of public examinations upon educational practices. The harm of public examinations or centralized examinations particularly springs from the restrictions they impose upon curricula, teachers, and students. Smith et al. (1990) found that some teachers neglected teaching materials that were not included in public examinations due to the pressure to improve their students’ test scores. Oxenham (1984) indicated that bias from public examinations caused the most mechanical, boring, and debilitating forms of teaching and learning. Mathison (1987) claimed that teachers changed their instructional materials in order to resemble the format of public examinations. Studies from Baker (1989), Herman (1990), and Shepard (1990) disagreed at standardized tests’ narrowness of content, their lack of match with curricula and instruction, their neglect of higher order thinking skills, and the limited relevance and meaningfulness of their multiple-choice formats. Besides the narrowing of curricula and reduced emphasis on skills that require complex thinking or problem-solving, the other two main concerns about the negative influence of public examinations on curricula are: lost instructional time and test score pollution or increases in test scores.
without an accompanying rise in ability in the construct being tested (Alderson & Hamp-Lyons, 1996).

Another negative image, which is often associated with public examinations, is the authoritative control on education. Latham (1877) characterized the public examination system as an “encroaching power” that was influencing education, blurring distinctions between liberal and technical education, and narrowing the range of learning through forcing students to prepare by studying with crammers and in cramming schools. This “encroaching power” from public examinations also exerts control over the internal operations of education systems that are becoming increasingly complex (Eckstein and Noah, 1993a; Spolsky, 1994). If public examinations fail to reflect the learning principles, they will generate a harmful effect (Pearson, 1988). This effect is denoted as “negative washback.”

Summary

By viewing the debate from the recent studies, the phenomenon of testing washback is more complex than how it is commonly asserted. It is common to say that tests have both negative and positive influences on education. The notion of positive or negative washback is often associated with the quality of tests; that is, a poor test is asserted to conceive negative washback, whereas a good test is asserted to generate a positive washback. However, the other possibility also holds. Alderson and Wall (1993) argued that the relationship between a test and its impact, positive or negative, might not be as simple as that at first glance. The quality of washback might be independent from the quality of the test. A poor test can generate a beneficial effect if it makes teachers and
students do "good" things that they would not otherwise do, such as, preparing lessons more thoroughly, paying attention to the lesson, and taking the subject being tested more seriously. Similarly, Messick (1996) indicated that a poor test might be associated with positive effects and a good test with negative effects due to educational factors other than the quality of the test. Such a fact has been used in some settings in order to bring about innovation in curriculum through tests (Alderson, 1991).

Alignment of Curriculum and Public Examinations

Alignment of the curriculum and the public examination or external test refers to the match between the content and format of the curriculum and the content and format of the test. Curriculum alignment is commonly regarded as a process to improve instruction and tests. The process of curriculum alignment is usually established by two ways, frontloading and backloading.

Alignment by Frontloading

In the process of frontloading alignment, the curriculum is developed first and the test is designed to measure or assess whether students have learned what the curriculum includes. (See Table 2.1) In this scenario, the test always follows and does not lead the curriculum (Lindvall and Nitko, 1975). Frontloading alignment is commonly practiced. It is assumed that frontloading can prevent teaching to the test, which may lead to an extremely narrow and rigid view of the actual goals and objectives of any curriculum. Given an inappropriate test, narrowing of curriculum impedes teaching and learning (Smith, 1991a).
Alignment by Backloading

Opposite to frontloading, backloading refers to working from the test back to the curriculum, in terms that the curriculum to be taught is derived from the test to be given. (See Table 2.1) It is assumed that backloading alignment can produce quick results in improved test scores (Niedermeyer and Yelon, 1981). However, issues of teaching to the test remain the most troublesome problem in the whole backloading alignment process. One issue is whether anything on the instrument that ought not to be taught is tested. The other issue, a local educator often asks, is whether anything that a student should know is not tested or assessed.

<table>
<thead>
<tr>
<th></th>
<th>Design</th>
<th>Delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Frontloading</strong></td>
<td>Write the curriculum first and then develop a test to assess it</td>
<td>Teach the curriculum first and then develop a test to assess it</td>
</tr>
<tr>
<td><strong>Backloading</strong></td>
<td>Obtain publicly released test items and create a curriculum based upon them.</td>
<td>Obtain publicly released test items and create parallel classroom structures in which content/context is embedded</td>
</tr>
</tbody>
</table>

Table 2.1: Frontloading vs. backloading process of curriculum alignment (sources from English and Steffy, 2001)
**Teaching to the Test**

As Vallette (1994) pointed out, washback is particularly strong in situations where the students' performance on a test determines future career options. In such case, teachers often feel obliged to teach for the test, especially if their effectiveness as a teacher is in part evaluated by how well their students perform. The assumption that frontloading alignment prevents teaching to the test is often not the case, in terms that teaching to the test still occurs under the practice of frontloading. If the curriculum and the test correspond to each other, teaching to the test is inevitable and desired. The extent to which a test is useful to a given curriculum is the extent to which the test indeed measures the curriculum in the first place. In the alignment by frontloading, examining the test itself is one way to assess the test quality, in terms of determining whether anything on the instrument that ought not to be taught is tested or that ought to be taught is not tested.

A backloaded curriculum assumes "null curriculum"; that is, the content not tested or assessed in the test is not included in the curriculum. The act of "null curriculum" or "non-selection" is valued laden. The values not selected by the test makers represent an unknown element that may be at odds with local values (Fenwick, 1992). However, this is often not the case.

**Summary**

Curriculum alignment is a process to improve the match between the formal instruction that often occurs in the classroom and the instrument that is used to measure the instruction outcomes. Teaching to the test universally occurs in either the practice of frontloading or backloading. If a high match exists between the curriculum and the test, teaching to the test
is inevitable and desired. Otherwise, the data produced by the test is not useful in improving teaching and learning. In this case, using tests as the source to develop curriculum runs the risk of accepting and defining learning only in terms of what is tested in the test.

Impact of Public Examinations on Teachers' Perceptions

Hughes (1993) introduced a concept of trichotomy to construct a basic model of washback mechanisms. The trichotomy includes 1) the “participants,” including all of whose perceptions and attitudes towards their work may be affected by a test, such as students, teachers, administrators, materials developers and publishers, 2) the “process,” which refers to any actions taken by the participants that may contribute to the process of learning, such development of materials, syllabus design, and teaching methods, and 3) the “product,” which refers to what is learned and the quality of the learning. Hughes further noted that the nature of a test might first affect teachers' perceptions and attitudes. These perceptions and attitudes in turn might affect what teachers do in carrying out their work.

Under different levels of the impact of public examinations, teachers have different reactions toward the impact of public examinations on their curricular planning and instruction. From the recent literature, teachers have expressed they have perceived the impact of public examinations on their classroom syllabus, teaching contents, activities they implement in their classroom or their time arrangement, materials or supplementary sources they would use in class, their teaching methods, and the way they would assess their students. Over 67% of the teachers, surveyed by Khaniya (1990) in a study regarding
teachers’ perceptions of the public examinations in Nepal, revealed that they had to spend plenty of time preparing their students for the examinations; 80% said they had to prepare answers to possible questions on the examination; and 75% confessed they did "question spotting."

The influence of public examinations on teaching perceived by classroom teachers seems more apparent in some Asian countries or areas, such as Hong Kong, Taiwan, Japan, and Mainland China, where the educational system is known to be driven by public examinations. In the study about the extent of washback of the reformed language examination system in Hong Kong on teachers’ perceptions and actions, Cheng (1999) found out that the new examination system had led to a change of the teachers' syllabus. Some interviewed teachers indicated they would change their teaching for the new examination in order to increase their students' examination scores. These teachers believed it was their responsibility to help their students pass the examination. In Taiwan, "under the pressure of accountability stemming from students' performance on the public examination, high school English teachers mostly teach to the test" (Tai, 1999, p. 14). In Japan, where the English portion of the college entrance examination required students to translate classical texts, classroom activities with a focus on oral communication and creative language use were regarded as a waste of precious time (Valette, 1994). Findings from Noah (1993a) in his study about the secondary school public examinations in Mainland China also indicated that the nature of public examinations affected the perceptions and attitudes of teachers toward their classroom instruction.

A great body of research has noted that public examinations may influence teachers' perceptions of their curricula particularly in six dimensions: syllabus design, contents of
the subject, teaching materials, classroom activities, teaching methods, and classroom assessment. Thus, the following will review the relationships among teachers’ perceptions of the impact of public examinations on their curricular planning and instruction and the six dimensions.

**Syllabi**

The findings from a survey study in Nepal, conducted by Herman and Golan (1993), reported that public examinations affected most teachers' perceptions of their curricula. Specifically, over 50% of the teachers admitted that they would give substantial attention to mandated tests in their instructional planning and delivery. In devising their syllabi for instruction they would look at prior tests to assure that they covered the subject matter of the test or test objectives. Furthermore, they would adjust the sequence of their curricula based on what was included in the test. Hughes (1993), in his discussion of washback mechanisms, recognized how a test might affect the processes of syllabus design, including practicing the kind of items that were to be found in the test. This further affects learning outcomes or the product of that work.

**Contents**

Wall and Alderson (1996), in a longitudinal study, examined how washback of public examinations impacted English teaching in Sri Lanka. Data, gathered from a variety of methods (e.g., classroom observations, interviews, questionnaires, and analyses of materials) provided ample insights into the relationship between teachers' perceptions of teaching contents and public examinations. The following implies how public
examinations impact on teachers' lesson contents.

“A number of teachers, however, consistently skip over the listening lessons in their textbooks, because they know that listening will not be tested in the exam. Other teachers may 'do listening', but in a way that does not resemble the textbook designers' intentions. One teacher, for example, admitted that he only covers the listening lessons if the type of question that students have to answer resembles an item type that might appear in the examination for reading” (p. 216-217).

Most teachers in Taiwan, particular high school teachers, also admit they are influenced by the power of the public examinations. Thus, the status of their course is established by the importance of the teaching content reflected on the entrance examinations (Tai, 1999). Results from several other studies investigating how washback influences teaching (e.g., Cheng's study about how washback influences teaching in Hong Kong in 1995; Shohamy et al.'s study regarding washback effect over time in 1996; Watanabe's investigating washback in Japanese EFL classroom in 1996b) also suggested a clear impact of public examinations on teachers’ teaching contents. A great amount of the teachers either observed or interviewed in these studies revealed that they would put emphasis on the contents or focus on the skills tested by public examinations.

Materials

According to a study by Shohamy (1993), who examined the impact of the new oral test, a part of the national matriculation examination administered in Israel, the impact of public examinations should take the account of how teachers decided what materials to be used in classroom. She found out that ample new materials produced after the release of the new test results in Israel were mostly clones of the new test format. In addition,
teachers and regional supervisors developed practice pages and worksheets identical to those used in the test. Watanabe (1996b), in a study focused on investigating the relationship between university entrance examinations and teaching approaches in Japan, found out that all the textbooks used by the observed teachers were consisted of past exam papers and materials which were constructed by the teachers on the model of past exam papers.

**Activities or Time Arrangement**

A great number of teachers researched in the recent studied admitted that they were motivated to implement activities to promote their students' skills for the test. Teachers reported they used specific teaching activities in preparation for the test. They even expressed how they perceived the way of teaching and time allotment would have be different if public examinations had been cancelled (Shohamy et al., 1996).

The other evidence of the impact of public examinations on teachers’ perceptions of classroom activities or time arrangement was obtained by observing teachers using old syllabuses and others using new ones in a study conducted in Hong Kong by Cheng (1995). Cheng found that these two types of teachers did adopt different types of activities to fit into their syllabi. Some teachers perceived that they arranged their classroom activities carefully in order to achieve the requirements of the revised syllabus with an aim to help their students perform well on the examinations.
Assessment

Positive washback and negative washback are assumed to produce different impact on classroom assessment (Wall and Alderson, 1996). Positive washback would presumably influence teachers to mark their students' work using the criteria laid down in the textbook, which would also be the criteria used by examiners when marking public examinations, while negative washback would make teachers to adapt questions either from past papers or from publications design in order to prepare their students to succeed in public examinations.

A change of how teachers would evaluate their students due to the influence of public examinations was found in an empirical study regarding the new EFL test in Israel. According to Shohamy et al. (1996), "the rating scales which measure accuracy and fluency will be changed slightly and a new scale of task orientation will be added" (p. 307). This is because the rationale for the new EFL test is to increase the emphasis on teaching oral English with an aim to promote students' oral proficiency. This evidence implies the impact of public examinations on teachers’ perceptions of classroom assessment.

Methods

Hughes (1993) pointed out public examinations impacted on actions, such as the processes of teaching, which might then influence learning results. According to Hughes, such processes included changes in teaching methodology. Wall and Alderson (1996) tried to distinguish the impact of positive washback from negative washback by assuming that teachers would selectively use the efficient means, such as those suggested by Teachers' Guides, to develop their students' skills that would be assessed on the examinations if the
impact of public examinations was positive. Under negative washback, "teachers would use whatever methodology they felt most expedient to help them to prepare their students for the examination” (p. 200). Some aspects of teaching methods that were thought inefficient for preparing the students for the examination by the teachers might be neglected.

Most teachers expressed that they would change their teaching methodology for helping their students to succeed public examinations (Cheng, 1995). However, some empirical findings, most obtained from actual classroom observations, have found out that public examinations do not necessarily change teachers' methods in actual classroom teaching (e.g., Alderson and Hamp-Lyons, 1996; Wall and Alderson, 1996; Watanabe, 1996a and 1996b). Thus, some researchers have argued that public examinations might have impact on what teachers teach but not how they teach.

Summary

As it is apparent from the review, public examinations may affect on one aspect of teaching, but not another (Alderson and Wall, 1993; Blewchamp, 1994) or it may affect some teachers in different ways than it does others (Alderson and Hamp-Lyons, 1996). The degree that teachers perceive the impact of public examinations on their teaching may depend on a variety of factors. Thus, it is necessary to review and discuss these possible factors and intervening elements that influence the extent that teachers perceive the impact of public examinations on their curricular planning and instruction. According to literature, these factors can be categorized into two main domains: teacher characteristics and context characteristics.
Teacher Characteristics

As Markee (1997) pointed out, teachers are implementers, who make innovative materials work in the classroom. Teachers' perceptions act as a crucial factor in the dynamic of English as a foreign language curriculum innovation. Without effecting a change in teachers' perceptions, any systematic innovation in the curriculum, which purports to bring about a communicative dimension to EFL instruction, will not carry out a significant effect on what happens in classrooms (Young and Lee, 1984). Thus, teachers' expressed perceptions to an innovated curriculum are the primary source often used to evaluate curriculum innovations after the innovations have been adopted by schools (Morris, 1988). Teachers' perceptions towards an innovated curriculum could be a response to its intrinsic or normative features. However, teachers' perceptions towards the use of an innovated curriculum, including curriculum materials and instruments used to measure the outcomes, will be determined by different and possibly more influential factors that commonly include the following ones.

Teaching Experience

A great body of recent studies investigating the relationships between public examinations and EFL instruction have provided evidence that teachers' teaching experience is one of the major factors, which helps explain why washback happen to some teachers, but not to others (e.g., Cheng, 1995; Shohamy, et al., 1996; Watanabe, 1996a; Watanabe, 1996b). A significant finding from examining experienced and novice teachers by Shohamy et al. (1996) showed that experienced teachers were more sensitive to public
examinations and thus were more likely to turn to the test as their main source of guidance for teaching and to use test-oriented materials.

**Education Background**

Watanabe (1996a and 1996b), in two studies about the impact of testing washback, concluded that teachers' perceptions of instruction might be partially attributable to their educational backgrounds. Teachers who majored in theoretical linguistics at postgraduate level might teach differently from those who obtained a B.A. degree from teacher college/university or those who obtained a B.A. degree from a general university. "In second language teaching, teacher education programs typically consist of a knowledge base drawn from linguistics and language learning theory, and a practical component based on language teaching methodology and opportunity for practice teaching" (Richards and Nunan, 1990, p. 49-50). This external factor thus takes some account of why washback occurs or does not occur.

**Professionalism in Teaching**

"A large number of teachers help students cope with the examinations in order to preserve their reputation as good teachers. This situation is unavoidable because of the extrinsic values of examinations" (Khaniya, 1990, p. 51). Teachers' fear and the associated guilt, shame or embarrassment of poor results from their students’ performance in public examinations might lead teachers to teaching to the test (Alderson and Wall, 1993). Public examinations thus are commonly asserted to have a negative impact on the way teachers perceived their curricula, such as narrowing their curricula and modes of instruction.
Awareness of Examination

Teachers who are aware of public examinations, particularly the formats or contents to be tested, are more likely to perceive the impact of public examinations on their instruction (Alderson and Wall, 1993). According to Hughes (1988), teaching for the test becomes teaching towards the proper objectives of the course. Exam coaching seems inevitable especially when teachers have more awareness of contents, skills, and/or formats to be tested in examinations.

Importance of Examination

A test will have strong washback if it is associated with a reputable or well-known organization (Gates, 1995). The amount and type of washback will vary according to the status of the test or the level of the stakes (Alderson & Hamp-Lyons, 1996). High-stakes testing is used for important decisions and thus has more power to modify local behavior compared to low-stakes testing. Low-stakes testing is generally not anticipated to be central to decision-making so that the test performance usually does not stimulate significant reward or sanctions (Madaus, 1985). The higher the stakes of a test is, the more likely the teachers’ perceptions of curricular planning and instruction will be impacted by such a test (Romberg et al., 1989; Wilson and Corbett, 1991; Shohamy et al., 1996).
Summary

The other teacher factors related to the research context, which are often presented to explain why teachers may develop different curricula and teach differently in linguistic and educational literature, but yet have not been studied to associate with teachers’ perceptions of washback effect on instruction, are gender and the frequency of participating in in-service teacher education programs. Since these factors are often associated with teaching variation, they are included as independent variables to add up more explanation about the level of the impact of public examinations on teachers’ perceptions of curricular planning and instruction. According to literature, teacher factors are more likely to influence teachers' perceptions of the impact of public examinations on their curricular planning and instruction than context factors. Thus, these seven factors are treated as the main independent variables that are measured to predict and explain to what extent teachers may perceive the impact of public examinations on their curricular planning and instruction.

Context Characteristics

Teachers are key players in any attempt to promote curriculum innovations. Of all the factors, teachers' perceptions act as a crucial indicator regarding how an innovated curriculum is carried out. This includes the extent to which teachers actually implement new materials and approaches into their classroom and the degree to which teachers actually reconstruct their pedagogical values (Markee, 2001). According to literature, teachers' perceptions are determined by different factors. Despite the factors associated
with teacher characteristics that have been discussed, context factors add to another explanation for why a curriculum innovation may succeed in one context but not in another and why washback may occur to influence some teachers but not others.

School Type and Location

"Tests always play a certain role in a specific context, so washback research needs to take these contextual factors into account" (Watanabe, 1996b, p. 239). This implies that one of the explanations for the level of washback effect may attribute to various school background variables, such as school location (in rural or metropolitan areas) and school type (public or private). In the study of effects of two state testing programs on curriculum and instruction, Wilson and Corbett (1991) indicated that district variation or community demographics, including the size and location of the community (urban, suburban, or rural) where the schools were located, contributed to the explanatory power of testing effects. A noteworthy finding from the study suggested a negative but significant relationship between district size and the adjustments of curriculum and instruction.

Grade

Teachers who were teaching the upper-level students reported to focus their teaching more exclusively on the skills that would be tested in the exam than lower-level teachers because the students in the upper level were closer to take the exam (Shohamy, et al., 1996). Similarly, Alderson and Wall (1993) also found out that teachers in the upper grades were more inclined to model instruction to meet the objectives of public examinations. Grade levels that teachers are teaching thus further explain for why washback effect is perceived
Students' Learning Attitudes

Under an examination-driven educational system, such as Hong Kong, Japan, Mainland China, and Taiwan, public examinations not only lead teachers to teaching to the test, but also lead students to learning for the test. Tests are commonly assumed to bring about some change in motivation and thus in behavior associated with teaching and learning. Students, particularly those with high orientation toward success or toward avoidance of failure in the public examination, would expect their teachers to cover what will be tested. Students' learning attitudes, thus, may influence teachers' curricular and instructional knowledge (Beattie, 1995). Students' learning attitudes may not directly influence how teachers perceive testing washback on their curricular planning, but it causes certain indirect influence.

External Pressure in Teaching

Herman and Golan (1991 and 1993), in their study comparing teachers' perceptions of the effect of standardized testing, reported that teachers in schools with increasing test scores felt more pressure to improve their students' test scores from different external sources than teachers in schools with stable or decreasing scores did. The external sources included their principals, other school administrators, other teachers, parents, the community, and/or the media. In general, the investigated teachers, who either perceived high pressure or low pressure from external sources, reported that testing affected their instructional planning and delivery. Hamp-Lyons (1997) also suggested taking external
forces, which existed within society, education and schools, into consideration while studying the washback effect on teaching.

Summary

Class size is also considered as one of the context factors in this study because it may indirectly influence teachers’ teaching (Watanabe, 1996a). Context factors are treated as rival independent variables that may co-contribute to the explanation for why teachers may perceive the level of the impact of public examinations on their instruction differently. These rival variables are school type (private or public), school location (rural, suburb, or urban), whether the teacher is teaching the third-year students, perceived students' learning attitudes, perceived attention from external forces, and class size.
CHAPTER 3

METHODOLOGY

The research method in this study is Ex Post Facto research, a type of relational research, with an aim to obtain data in order to test the hypotheses and answer the research questions. A relational study usually begins with specific hypotheses. The end sought is to explain and predict relationships between variables (Miller, 1999).

Research Questions and Hypotheses

Research Questions

In order to facilitate the investigation regarding how Taiwan junior high school English teachers perceived the impact of the BCT on their curricular planning and instruction, the researcher formulated the following research questions.

1. What are the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction (the dependent variable)?

2. What are the relationships among the main independent variables (teachers' perceived awareness of the BCT, teaching experience, educational background, perceived importance of the BCT, gender, participation in in-service teacher education programs and perceived professionalism in teaching) and the dependent
variable (teachers’ perceptions of the impact of the BCT on their curricular planning and instruction)?

3. What are the relationships among the rival independent variables (school type, school location, grade, class size, perceived students' learning attitudes, and perceived external pressure in teaching) and the dependent variable?

4. What is (are) the intervening variable(s) of each of the main independent variables that influenced the dependent variable?

5. How much of the variance in the dependent variable can be explained by each of the independent variables?

**Sub-questions and Research Hypotheses**

The following sub-questions and hypotheses were established in order to answer the research questions and, thus, to fulfill the research purpose.

1. Relationships between each of the main independent variables and the dependent variable

1-1. Is there a relationship between perceived awareness of the BCT and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

1-2. Is there a relationship between perceived importance of the BCT and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

1-3. Is there a relationship between teaching experience and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?
instruction?
1-4. Is there a relationship between educational background and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

1-5. Is there a relationship between professionalism in teaching and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

1-6. Is there a relationship between teachers’ gender and their perceptions of the impact of the BCT on their curricular planning and instruction?

1-7. Is there a relationship between participation in in-service teacher education programs and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

2. Relationships between each of the rival independent variables and the dependent variable

2-1. Is there a relationship between school type and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

2-2. Is there a relationship between school location and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

2-3. Is there a relationship between grade and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

2-4. Is there a relationship between class size and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

2-5. Is there a relationship between perceived students' learning attitudes and the
teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

2-6. Is there a relationship between perceived external pressure in teaching and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

3. Relationships among each of the main independent variables and the rival independent variables

3-1. Is there a relationship among teaching experience and the rival independent variables?

3-2. Is there a relationship among educational background and the rival independent variables?

3-3. Is there a relationship among perceived awareness of the BCT and the rival independent variables?

3-4. Is there a relationship among perceived importance of the BCT and the rival independent variables?

3-5. Is there a relationship among perceived professionalism in teaching and the rival independent variables?

3-6. Is there a relationship among gender in teaching and the rival independent variables?

3-7. Is there a relationship among participation in in-service teacher education programs and the rival independent variables?

4. Relationships among the main independent variables and the dependent variable with holding the rival independent variables constant
4-1. If the rival independent variables are statistically controlled, there will be no relationship among the main independent variables and the dependent variable.

5. Relationships among the independent variables and the dependent variable

5-1. The variance of dependent variable explained by the linear combination of the independent variables will be zero.

5-2. Each of the independent variables will not contribute significantly to the variance of the dependent variable when the other independent variables are controlled.

Population and Sample

Target Population

The target population was junior high school English teachers in Taiwan. Since the Education Statistics of Taiwan (2000) did not provide a source of the names of all junior high school English teachers, an estimated method based upon the total number of classes and average classes a teacher taught was used to calculate the target population.

According to the source from the Education Statistics of Taiwan (2000), there were 26,653 classes in junior high schools of Taiwan. Each English teacher taught an average of 4 classes. So, the estimated number of teachers in the target population was 6,663, which was derived by having 26,653 divided by 4.
Sample

Based upon the consideration of statistical power, three different formulas, developed respectively by Cochran (1977), Krejcie and Morgan (1970), and Mendenhall, Ott and Scheaffer (1990), were compared to decide an appropriate sample size. The results derived from the three formulas for 95% confidence were very close, with 100 subjects from Cochran’s formula, 94 subjects from Krejcie and Morgan’s formula, and 99 subjects from Mendenhall, Ott and Scheaffer’s formula. Cochran’s formula was used in this study to draw a maximum number of the subjects. The formula of sampling for proportions developed by Cochran (1977) is delineated below.

\[ n_0 = \frac{t^2pq}{d^2} \]

where --

\( d \) = acceptable margin of error for the proportion being estimated (degree of precision)
\( t \) = risk willing to take that actual margin of error may exceed acceptable margin of error
\( p \) = estimated proportion of the elements in the population in the category of interest
\( q = 1 - p \)

If \( n_{00} > .05 \), the following formula of finite population correction to adjust estimated sample size is used:

\[ n = \frac{n_0}{1 + \frac{n_0}{N}} \]

Based upon this formula, the researcher made the following criteria for this study.

\( d \) = The acceptable margin of error for the proportion in the population is \( \pm 10\% \).
\( t \) = The risk the researcher is willing to take is 1 in 20 (95% confidence level). From the statistical table of the \( t \) distribution, the value of critical \( t \) is 1.96, rounded to 2.0.
p = The estimated proportion of the elements in the population in the category of interest is set to 0.5 in order to reach the maximum variance. So, q = 0.5 (1-p).

So, \( n_0 = \frac{2^2 \times 0.5 \times 0.5}{0.1^2} \)

\[= 100 \text{ (subjects)} \]

Finite population correction to adjust estimated sample size was not used because 100 divided by 6,663 was less than 0.05.

Multistage sampling was used in the study. Cluster random sampling was used to select schools. All of the English teachers teaching at the randomly selected schools were then request to respond to the questionnaires. The estimated average number of English teachers in a junior high school was 9.3, which was derived from having 6,663 (the total number of English teachers) divided by 719 (the total number of schools, sources from the Education Statistics of Taiwan, 2000). Eleven schools were randomly selected, derived from having the sample size of the study (100 subjects) divided by the average number of English teachers (9.3). When the final sample was drawn, the total number of the teachers who were teaching in the 11 selected schools was 151. All of English teachers teaching in these 11 schools were requested to respond to the questionnaires.

As to the sampling procedure for the focus group interviews, all interviewed teachers were purposefully selected from Taiwan's junior high schools. The participants had the following characteristics:

- The participants were currently teaching English at junior high schools in Taiwan, so they could provide the needed information related to the research topic.
- The participants were volunteers. They were willing to discuss the topic without
The major consideration for selecting the group size was that the group size should be small enough to allow each participant to share insights, but large enough to provide diversity of perceptions. Krueger (1994) suggests having four to five participants to involve in each focus group interview because small groups of four or five participants afford more opportunity to share ideas and can be easily accommodated in an environment where space is at a premium. Depending upon the amount of new information provided, three groups were interviewed in this study. The first and third groups consisted of five participants and the second group had six participants.

Research Design

The relational research method was used in order to obtain the data to test the hypotheses and answer the research questions proposed in this study. Data were collected via the survey questionnaires and focus group interviews. The survey method was used to collect data so subjects in remote or distant areas could be reached (Orlich, 1978). The survey method enabled the researcher to gather data to explain the washback phenomenon and determine the relationships among how the washback phenomenon was perceived across teacher and school characteristics from a group of subjects that could be generalized to a large population (Schumacher and McMillan, 1993). While survey enabled the researcher to obtain a general picture about how teachers perceived the impact of the reformed testing objectives, interviews tended to provide in-depth information so as to help the interpretation of the data collected by the quantitative method. A group interview is essentially a qualitative-data gathering technique (Denzin and Lincoln, 1994). Evidence
from focus group interviews suggests that attitudes and perceptions associated with concepts are developed in part by interaction with other people (Krueger, 1994). Bulmer (1969) commented that a group interview has the potential to bring a small number of such individuals together as a discussion and resource group, which is more valuable, many times over, than any representative sample. The focus group interview works better than a one-on-one interview in promoting self-disclosure among participants. In summation, while survey gave a general understanding as to how teachers perceived the impact of the BCT on their curricular planning and instruction, interviews tended to provide detailed information about how teachers actually reacted in the context of the revised syllabus. Both of these two methods complemented each other in this research.

Survey Technique

The teachers who were teaching English at the randomly selected schools were requested to answer the questionnaires. A code was placed on each questionnaire to provide for confidentiality of the personal information. In this study, how teachers perceived the impact of the BCT on their curricular planning and instruction was the dependent variable which was a naturally occurring event that the researcher could not manipulate. Six delimited dimensions related to teachers perceptions, namely classroom syllabi, teaching contents, methods, activities, materials, and classroom assessment, were measured in order to interpret the level of teachers’ perceptions of the impact of the BCT on their curricular planning and instruction. Teacher characteristics were treated as the main independent variables because they were more directly related to teachers' perceptions. Based upon the literature review, these variables included 1) teaching experience, 2)
educational background, 3) teachers' perceived awareness of the BCT, 4) teachers' perceived importance of the BCT, 5) teachers' perceived professionalism in teaching, 6) gender, and 7) participation in in-service teacher education programs. The rival variables, which indirectly influenced teachers' perceptions on teaching, were 1) school type, 2) school location, 3) whether teaching the third-year students, 4) class size, and 5) perceived students' learning attitudes, and 6) teachers' perceived external pressure in their teaching.

The research hypotheses were based on testing the relationships among the dependent variable and the main independent variables. Following the advice of Kerlinger (1973), alternate or control hypotheses were formulated to describe the anticipated relationships among the identified rival variables and the dependent variable. In addition, the relationships of the main independent variables and the rival variables were investigated. Figure 3.1 presents the investigated relationships among independent variables and among the independent variables and dependent variable. The end sought of this study was to examine to what extent the dependent variable could be explained and predicted by the independent variables.
Figure 3.1: Relationships among dependent variables and independent variables

**Dependent Variable**
(Teachers’ perceptions of the impact of the BCT on their curricular planning and instruction)

**Main Independent Variables**
1. Teaching experience
2. Education
3. In-service teacher education
4. Perceived professionalism in teaching
5. Perceived importance of the exam
6. Gender
7. Perceived awareness of the exam

**Rival Independent Variables**
1. School type
2. School location
3. Grade(s) the teacher is teaching
4. Perceived students' learning attitudes
5. Perceived attention from external forces
6. Class size
Focus Group Interviews

Purposively selected teachers participated to discuss the five questions listed on the focus group interview guide. The researcher was the moderator who managed the whole discussion process. An assistant moderator was chosen and trained to work as a team with the moderator. The responsibility of the assistant moderator was to: 1) prepare, operate, and monitor the recording equipment, 2) prepare and organize the refreshments, 3) arrange the meeting room, 4) welcome the participants as they arrived, 5) take notes throughout the discussion, including notes on participants’ body language, 6) provide an oral summary of key points at the conclusion of each interview, 7) handle interruptions and problems (e.g., late comers, background, noise, and poor lighting), 8) participate in a de-briefing session with the moderator after each interview, and 9) assist with and provide feedback on the analysis report (Krueger, 1994). Each interview took 1 hour to 1.5 hours. The aim of the focus group interviews was to provide insights to help interpret the meaning of the data obtained from the survey method.

Instrumentation

A survey questionnaire was developed by the researcher to obtain general data regarding teachers’ perceptions of the impact of the BCT on their curricular planning and instruction. In addition, a semi-structured interview topic guide for focus group interviews was developed to obtain detailed information about how teachers perceived the BCT impacts their curricular planning and instruction.
Survey Questionnaire

The objectives of the questionnaires were to obtain data regarding 1) the level of the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction within the six dimensions: syllabus, content, material, activity/time arrangement, method, and assessment, 2) relationships among the teacher characteristics and the level of the teachers' perceptions, and 3) relationships among the context characteristics and the level of the teachers' perceptions.

The survey questionnaire was developed mainly from the following sources:

- The Junior High School Curriculum Standards in English Education, issued by the Ministry of Education in Taiwan in 1994.
- The Junior High School Teachers’ Manuals in English instruction, issued in 1997 by the Ministry of Education in Taiwan.
- Relevant research studies, associated with the impact of public examinations (Herman and Golan, 1991; Wilson and Corbett, 1991; Alderson and Wall, 1993; Andrew, 1994; Beattie, 1995; Cheng, 1995; Shohamy et al.; 1996; Wall and Alderson, 1996; Watanabe, 1996b; Alderson and Hamp-Lyons, 1996; Tai, 1999).
- Interviews of Taiwan’s junior high school English teachers.

The first part of the questionnaire, question 1 to question 38, was related to how teachers perceived the impact of the BCT on their curricular planning and instruction in the six dominions: activity/time arrangement (question 1 to 7), teaching methods (question 8 to 12), materials they would use in their classroom (question 13 to 17), their syllabus design (question 18 to 24), the contents they would teach (question 25 to 31), and their classroom assessment (question 32 to 38). The second part of the questionnaire, question 39 to 68,
was about the factors commonly associated with the level of teachers’ perceptions of the impact of the BCT on their curricular planning and instruction. By reviewing recent literature, the factors commonly associated with how teachers might perceive the impact of public examinations differently were perceived students' learning attitudes (question 39 to 41 and 43), teachers’ professionalism in teaching (question 42, 44-47, and 67), teachers' perceived external pressure in teaching (question 48 to 51 and 65-66), teachers’ perceived awareness of the test objectives (question 52 to 55), and teachers' perceived importance of the BCT (question 56 to 64). The third part of the questionnaire, question 68 to 75, was related to teacher and context characteristics.

In the first and second parts of the questionnaire, the statements assessed the level of teachers’ perceptions of the impact of the BCT on their curricular planning and instruction in the six dimensions and commonly associated factors which influenced the level of teachers' perceptions of the impact of the BCT on their curricular planning and instruction on a six-point continuum scale. On the scale, positive statements were coded as 1 = Strongly Disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Slightly Agree, 5 = Agree, and 6 = Strongly Agree. Negative statements were coded in reverse when data for these statements were entered into the computer for data analysis. These items were # 5, 7, 11, 12, 20, 30, 31, 35, 39, and 61. The scales were summated to determine mean averages. The scores for the mean in these scales were range from 1-6. The scale of measurement for item 1 to 67 was assumed to be interval.

The third part of the questionnaire measured various data concerning the location of the school that the teacher was teaching in, school type (public or private), teacher’s gender, whether the teacher was teaching the third-year high school students, the teacher’s
educational background, teaching experience, class size, and participation in in-service teacher education programs. The scale of measurement for location of school, school type, and gender was assumed to be nominal. The scale of measurement for grade(s) and educational background was ordinal, whereas the scale of measurement for teaching experience, class size, and participation in in-service teacher education programs was ordinal.

Focus Group Interviews

The objectives of having focus group interviews in this study were to obtain rich information from an empirical field investigation in order to help to interpret the meaning of the data collected by the survey technique, a quantitative method. The questions for the focus group interviews were developed based upon the following suggestions (Higgenbotham and Cox, 1979; Krueger, 1994):

- All questions should have a “stimulus” and a “response.” The stimulus is the topic of discussion, whereas the response provides clues to how people are expected to answer.
- The “focus” of a focus group interview should be achieved by careful use of unstructured to semi-structured questions.
- Including a “warm-up” question, no more than 12 questions. Five to six questions are usual.

A tape recorder was used to facilitate the process of data collection. Content analysis was used to interpret the raw data obtained from the focus groups interviews.
Validity and Reliability

Two types of validity of the survey questionnaire and focus group interview questions were concerned, namely content validity and face validity. A panel of experts from subject matter and measurement reviewed the instruments to determine content and face validity of the instruments. Two panel members were chosen as experts in teaching English as a second and foreign language education, four members were instrumentation experts, and two were junior high school English instruction experts in Taiwan (see Appendix A). A sample cover letter was mailed to panel members requesting their participation in this study and directions for establishing face and content validity (See Appendix B). The panel was asked to review the items for face and content validity using a questionnaire item validation form (See Appendix C), adapted from Diem (1987). A decision was made based upon a priori to reword an item judged to be appropriate but unclear or to delete an item judged to be inappropriate or unclear by two-thirds or more of the panel members.

Five English teachers who were representatives of the target population but not part of final sample were selected to conduct the field test in order to help clarify items. These teachers were asked to review the items in order to help with wording, thoroughness, ease of use, format, and overall instrument appearance. Based upon the comments from the panel members and the field test, the focus group interview questions and the survey instrument were revised and a draft instrument was developed for the pilot test.

Twenty-three teachers who were representative but not final sample were selected to conduct the pilot test to establish reliability of the first part and second part of the survey questionnaire. These teachers were asked to response to the 63 items listed in the first part and second part of the draft survey questionnaire. Cronbach’s alpha was applied to the data
produced by the pilot test to establish a coefficient of internal consistency. An acceptable value was set a priori at 0.05. The internal consistency reliability coefficient for the 37 items of the first part of survey questionnaire regarding impact of the BCT on teachers’ curricular planning and instruction was 0.87 and for the 26 items of the second part of survey questionnaire regarding factors associated with teachers’ perceptions of impact of the BCT on their curricular planning and instruction was 0.68. The third part of survey questionnaire was not a likert-type scale, so Cronbach's alpha was not applied.

As to the focus group interviews, two Ph.D. students in the Foreign Language Education of the Ohio State University, who ever taught English in Taiwan, helped pilot the focus group interview guide in order to see whether the questions and the process on the guide were appropriate. Based upon the result of the pilot test, the final survey questionnaire and the focus group interview guide were developed (See Appendix D and E).

Data Collection Procedures

Survey

One of the methods of data collection used in this study was the survey which was conducted from May to June 2001. Due to the lack of the information of the subject names, the questionnaires were instead sent to the teaching and administrative deans of the selected schools. The deans were asked to help distribute the questionnaires to each of English teachers in their schools and collect data. The data collection procedures followed the steps recommended by Dillman (1978) with some modifications. These steps are described as below:
A phone call was made to the deans of the selected schools informing them of the forthcoming questionnaires.

A week later, the survey packet was mailed to the deans. The packet included: 1) letter to the dean to explain how to help with the data collection, 2) cover letter to the teacher, 3) questionnaires, and 4) pre-addressed, stamped return envelope. The cover letter specified: 1) the purpose of the study and its social utility, 2) professional organization and institution, 3) why the respondent is important, 4) promise of confidentiality and explanation of identification, 5) the discussion of code number on the questionnaire, 6) what to do if questions arise, 7) an appreciation, and 8) deadline date.

A week later after the deadline to return the questionnaire, the first follow-up was conducted to remind the deans who did not return the questionnaires.

Another week after the first follow-up, phone call reminders were given to the deans who still did not return the questionnaires.

Double-dip (Dillman, 1978) was used to control non-response error. Fifteen percent of non-respondents were drawn to get their responses. Their responses were statistically compared to those from the respondents. A decision was made based upon the double-dip technique. That is, if no difference, the non-response error was collapsed. If different, the following proportionately weighted formula was used to adjust the data. The statistical procedures for the non-response error will be described in the section of data analysis. The proportionately weighted formula is delineated as: \( \text{Mean}_{\text{adjusted}} = \text{mean respondents} \left( \frac{\% \text{ respondents}}{\% \text{ non-respondents} - \% \text{ respondents}} \right) \).
In total, 83 questionnaires were returned from 151 respondents, with a response rate of 55%. From the 68 non-respondents, 10 subjects (15%) were randomly selected and contacted individually to complete the questionnaires in order to compare respondents’ and non-respondents’ differences.

Focus Group Interviews

The interviews were conducted in April 2001. Assent was obtained from all of the participants before the interviews (See Appendix F). A focus group discussion guide, including the questioning route, moderator’s guide, and discussion outline, was developed in advance to provide the direction for group discussion (See Appendix E). The moderator took keynotes and the assistant moderator took detailed notes throughout the discussion, including notes on participants’ body language. All of the interview session was tape recorded in order to avoid missing the interviewees’ comments.

Data Analysis

In this study, data were analyzed in two phases. First, statistics were used to analyze the quantitative data collected from the survey questionnaires. Content analysis according to a note-based technique suggested by Krueger (1994) was used to interpret the qualitative data obtained from the focus group interviews.
Survey

Data were analyzed by using SPSS 10.0. Descriptive statistics were first used to organize and summarize the collected data. Correlation and multiple regression analyses were then used to explain and predict the relationships among the independent variables and the dependent variable. Correlation was used to explain the relationship between the dependent variable and independent variables. Table 3.1 presents detailed information about the levels of the variables and what statistics was used to measure the relationship between each pair of variables with different levels.
<table>
<thead>
<tr>
<th>Variables</th>
<th>X1</th>
<th>X2</th>
<th>X3</th>
<th>X4</th>
<th>X5</th>
<th>X6</th>
<th>X7</th>
<th>X8</th>
<th>X9</th>
<th>X10</th>
<th>X11</th>
<th>X12</th>
<th>X13</th>
<th>Y1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching experience (X1)</td>
<td>*K</td>
<td>K</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational background (X2)</td>
<td>K</td>
<td>K</td>
<td>K</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>K</td>
<td>K</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>K</td>
</tr>
<tr>
<td>Awareness of the BCT (X3)</td>
<td>*P</td>
<td>P</td>
<td>r_pb</td>
<td></td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>P</td>
</tr>
<tr>
<td>Status of the BCT (X4)</td>
<td>P</td>
<td>r_pb</td>
<td>r_pb</td>
<td></td>
<td>p_b</td>
<td>P</td>
<td>P</td>
<td>K</td>
<td>K</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>K</td>
</tr>
<tr>
<td>Professionalism in teaching (X5)</td>
<td>phi</td>
<td>phi</td>
<td>phi</td>
<td>r_pb</td>
<td>r_pb</td>
<td>phi</td>
<td>C</td>
<td>C</td>
<td>r_pb</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>r_pb</td>
</tr>
<tr>
<td>School type&lt;sup&gt;a&lt;/sup&gt; (X6)</td>
<td>phi</td>
<td>phi</td>
<td>phi</td>
<td>r_pb</td>
<td>r_pb</td>
<td>phi</td>
<td>C</td>
<td>C</td>
<td>r_pb</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>r_pb</td>
</tr>
<tr>
<td>School location&lt;sup&gt;b&lt;/sup&gt; (X7)</td>
<td>phi</td>
<td>phi</td>
<td>phi</td>
<td>r_pb</td>
<td>r_pb</td>
<td>phi</td>
<td>C</td>
<td>C</td>
<td>r_pb</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>r_pb</td>
</tr>
<tr>
<td>Teaching grade three&lt;sup&gt;c&lt;/sup&gt; (X8)</td>
<td>phi</td>
<td>phi</td>
<td>phi</td>
<td>r_pb</td>
<td>r_pb</td>
<td>phi</td>
<td>C</td>
<td>C</td>
<td>r_pb</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>r_pb</td>
</tr>
<tr>
<td>Perceived students' learning attitudes (X9)</td>
<td>r_pb</td>
<td>r_pb</td>
<td>r_pb</td>
<td>phi</td>
<td>C</td>
<td>K</td>
<td>K</td>
<td>P</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>r_pb</td>
</tr>
<tr>
<td>External forces (X10)</td>
<td>r_pb</td>
<td>r_pb</td>
<td>phi</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>r_pb</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>r_pb</td>
</tr>
<tr>
<td>Gender&lt;sup&gt;d&lt;/sup&gt; (X11)</td>
<td>C</td>
<td>C</td>
<td>r_pb</td>
<td>P</td>
<td>r_pb</td>
<td>K</td>
<td>K</td>
<td>P</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>r_pb</td>
</tr>
<tr>
<td>In-service programs (X12)</td>
<td>C</td>
<td>C</td>
<td>r_pb</td>
<td>K</td>
<td>K</td>
<td>K</td>
<td>P</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>r_pb</td>
</tr>
<tr>
<td>Class size (X13)</td>
<td>K</td>
<td>K</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>K</td>
</tr>
<tr>
<td>Teachers' perceptions of the BCT (Y1)</td>
<td>K</td>
<td>K</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>K</td>
</tr>
</tbody>
</table>

- a: 0 = public; 1 = private
- b: 0 = Rural; 1 = Urban
- c: 0 = Yes; 1 = No
- d: 0 = Male; 1 = Female

"K" refers to "Kendall's C" correlation;
"C" refers to "Cramer's V" correlations;
"P" refers to "Pearson Product-Moment" correlation;
"r_pb" refers to "Point-Biserial" correlation.

Table 3.1: Measures of linear relationship (association) between variables
The magnitude of the relationships investigated in this study was described based on the scale delineated by Davis (1971) as shown on Table 3.2.

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.70 to 0.99</td>
<td>Very strong association</td>
</tr>
<tr>
<td>0.50 to 0.69</td>
<td>Substantial association</td>
</tr>
<tr>
<td>0.30 to 0.49</td>
<td>Moderate association</td>
</tr>
<tr>
<td>0.10 to 0.29</td>
<td>Low association</td>
</tr>
<tr>
<td>0.01 to 0.09</td>
<td>Negligible association</td>
</tr>
</tbody>
</table>

Table 3.2: Magnitude of association

Multiple regression analyses using a hierarchical strategy were used to test hypothesis 4. Multiple regression analyses using a simultaneous strategy were used to test hypothesis 5. An alpha level of .05 was established prior to data treatment.

Non-Response Error Control

T-test statistics were used to test any differences between the response group and non-response group for the non-response control in the main variables of this study: 1) their perceptions of curricular planning and instruction, 2) perceived students' learning attitudes, 3) teachers' professionalism in teaching, 4) teachers' perceived external pressure...
in teaching, 5) teachers' perceived awareness of the BCT, and 6) teachers' perceived importance of the BCT. An alpha level of 0.05 was established prior to test the significance. As shown in Tables 3.3-3.8, the p-value indicated no statistical significances between the means of the each of the variables at the alpha level of 0.05. Since the results did not indicate any difference between the answers of the two groups, the proportionately weighted formula was not used to adjust the data. The data of non-response group were collapsed as representative of the sample and population.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std Dev</th>
<th>df</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response</td>
<td>83</td>
<td>151.23</td>
<td>14.83</td>
<td></td>
<td>1.94</td>
</tr>
<tr>
<td>Non-response</td>
<td>10</td>
<td>141.60</td>
<td>14.87</td>
<td>91</td>
<td></td>
</tr>
</tbody>
</table>

p >0 .05

Table 3.3: Scores on perceptions of curricular planning and instruction between response group and non-response group
<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std Dev</th>
<th>df</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response</td>
<td>83</td>
<td>14.57</td>
<td>2.62</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td>90</td>
<td>-.59</td>
</tr>
<tr>
<td>Non-response</td>
<td>10</td>
<td>15.10</td>
<td>3.11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$p > 0.05$

Table 3.4: Scores on perceived students' learning attitudes between response group and non-response group

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std Dev</th>
<th>df</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response</td>
<td>83</td>
<td>23.88</td>
<td>4.67</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>90</td>
<td>-.28</td>
</tr>
<tr>
<td>Non-response</td>
<td>10</td>
<td>24.30</td>
<td>3.53</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$p > 0.05$

Table 3.5 Scores on teachers' perceived professionalism in teaching between response group and non-response group
### Table 3.6: Scores on teachers' perceived external pressure in teaching between response group and non-response group

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std Dev</th>
<th>df</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response</td>
<td>83</td>
<td>22.17</td>
<td>4.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-response</td>
<td>10</td>
<td>22.20</td>
<td>2.49</td>
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</tbody>
</table>

p > 0.05

### Table 3.7: Scores on teachers' perceived awareness of the BCT between response group and non-response group

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std Dev</th>
<th>df</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response</td>
<td>83</td>
<td>15.51</td>
<td>2.28</td>
<td></td>
<td>.28</td>
</tr>
<tr>
<td>Non-response</td>
<td>10</td>
<td>15.30</td>
<td>2.31</td>
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p >0.05
Table 3.8: Scores on teachers' perceived importance of the BCT between response group and non-response group

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std Dev</th>
<th>df</th>
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</thead>
<tbody>
<tr>
<td>Response</td>
<td>83</td>
<td>33.91</td>
<td>6.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-response</td>
<td>10</td>
<td>36.40</td>
<td>5.91</td>
<td></td>
<td>-1.09</td>
</tr>
</tbody>
</table>

p > 0.05
Focus Group Interviews

The note-based content analysis was used to analyze the focus group interviews. The raw data used for the note-based content analysis relied primarily on 1) filed notes which were based on observations and comments in the interviews, 2) a debriefing session, and 3) summary comments at the conclusion of each interview. The use of tape was primarily to verify specific quotes and to translate the oral summary at the conclusion of the interview.

The analysis was based upon two criteria. First, the analysis process was systematic in the sense that it followed a prescribed and sequential process. The structure of systematic note-based analysis was adapted from Krueger (1994) with some modifications (See Appendix G). Second, the analysis was verifiable. It could permit another analyst to arrive at similar conclusions using available documents and raw data. In order for analysis to be verifiable, the data stream began with field notes and recordings that were taken during the interviews, continued with the oral summary of key points during the interviews, went into the debriefing with the moderator team immediately following the interviews, and also included the electronic recording with the possibility of a translation of the interviews (Krueger, 1994).

After the interviews, the draft report for each interview was sent to each of the interviewed teachers to check whether the content was valid. A peer expert with a background in research was asked to review the frequency of counting and data interpretation in order to check the researcher's accuracy in this analysis.
CHAPTER 4

FINDINGS

The purposes of this study were: 1) to determine relationships among how the impact of the BCT was perceived and the selected variables and 2) to determine intervening variables moderating each of the main independent variables.

This study was designed to investigate the following characteristics:

1. Main independent variables
   1-1. Teaching experience
   1-2. Educational background
   1-3. Perceived awareness of the BCT
   1-4. Perceived importance of the BCT
   1-5. Perceived professionalism in teaching
   1-6. Gender
   1-7. Participation in in-service teacher education programs

2. Rival independent variables
   2-1. School type
   2-2. School location
   2-3. Grade the teacher is teaching
2-4. Perceived students' learning attitudes

2-5. Teachers' perceived external forces in teaching

2-6. Class size

3. Dependent variable

Teachers' perceptions of the impact of the BCT on their curricular planning and instruction in the six domains:

1-1. Syllabi
1-2. Methods
1-3. Contents
1-4. Classroom activities
1-5. Materials
1-6. Assessment

The end sought of this study was to explain and predict relationships among the dependent variable and independent variables. The target population was Taiwan junior high school English teachers. The survey method and focus group interviews were used to collect data in order to test the hypotheses and answer the research questions.

Survey

Descriptive Data

Multistage sampling was applied in the study. Cluster random sampling was used to select schools. All of the English teachers teaching at the randomly selected schools were requested to respond to the questionnaires.
As shown in Table 4.1, of the 83 teachers who responded to the questionnaires, six teachers did not answer question 68, 70, 71, 73-75; five did not answer question 69; and seven did not answer question 72 on the demographic section (Part III). Of those who answered the demographic section, almost 60% of the teachers were teaching in urban schools. Most of the teachers (91%) were teaching in public schools. Over 83% of the teachers were female. Seventy-one percent were teaching the third-year students in junior high school. Over 80% of the teachers had earned a Bachelor's degree. Over 36% of the teachers had been teaching in high school for over 16 years, 27% 11-15 years, and 22% 6-10 years. Most of the teachers (84%) responded that, on average, they had 31-39 students or 40-49 students in a class. Over 67% of the teachers had attended 5 or fewer than 5 in-service teacher education programs within the past five years.
<table>
<thead>
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<th>Characteristic</th>
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<th>Percentage</th>
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<td></td>
</tr>
<tr>
<td>Rural</td>
<td>31</td>
<td>37.3</td>
</tr>
<tr>
<td>Urban</td>
<td>46</td>
<td>59.7</td>
</tr>
<tr>
<td>Total</td>
<td>77</td>
<td>100.0</td>
</tr>
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<td><strong>School type</strong></td>
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<td></td>
</tr>
<tr>
<td>Public</td>
<td>71</td>
<td>91.0</td>
</tr>
<tr>
<td>Private</td>
<td>7</td>
<td>9.0</td>
</tr>
<tr>
<td>Total</td>
<td>78</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
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<td></td>
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<tr>
<td>Male</td>
<td>13</td>
<td>16.9</td>
</tr>
<tr>
<td>Female</td>
<td>64</td>
<td>83.1</td>
</tr>
<tr>
<td>Total</td>
<td>77</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Whether teaching the third-year students</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>55</td>
<td>71.4</td>
</tr>
<tr>
<td>No</td>
<td>22</td>
<td>28.6</td>
</tr>
<tr>
<td>Total</td>
<td>77</td>
<td>100.0</td>
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</table>

Table 4.1: Characteristics of surveyed teachers (Continued)
Table 4.1: (Continued)

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<tr>
<td>MA</td>
<td>11</td>
<td>14.5</td>
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<tr>
<td>Other</td>
<td>3</td>
<td>3.9</td>
</tr>
<tr>
<td>Total</td>
<td>76</td>
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</table>

<table>
<thead>
<tr>
<th>Teaching experience</th>
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</thead>
<tbody>
<tr>
<td>5 or under 5</td>
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<td>14.3</td>
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<tr>
<td>6-10</td>
<td>17</td>
<td>22.1</td>
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<tr>
<td>11-15</td>
<td>21</td>
<td>27.3</td>
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<tr>
<td>16 or over 16</td>
<td>28</td>
<td>36.4</td>
</tr>
<tr>
<td>Total</td>
<td>77</td>
<td>100.0</td>
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</table>

<table>
<thead>
<tr>
<th>Class size</th>
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</thead>
<tbody>
<tr>
<td>Under 30</td>
<td>12</td>
<td>15.6</td>
</tr>
<tr>
<td>31-39</td>
<td>36</td>
<td>46.8</td>
</tr>
<tr>
<td>40-49</td>
<td>29</td>
<td>37.7</td>
</tr>
<tr>
<td>Total</td>
<td>77</td>
<td>100.0</td>
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<table>
<thead>
<tr>
<th>In-service programs attended within the past 5 years</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5 or under 5</td>
<td>52</td>
<td>67.6</td>
</tr>
<tr>
<td>6-9</td>
<td>12</td>
<td>15.6</td>
</tr>
<tr>
<td>Over 10</td>
<td>12</td>
<td>15.6</td>
</tr>
<tr>
<td>Total</td>
<td>77</td>
<td>100.0</td>
</tr>
</tbody>
</table>
**Correlation Analysis**

The following analysis is a bivariate correlation analysis which was used to determine the direction and magnitude of the relationships among each of the independent variables and the dependent variable. More specifically, the relationship reported below was between the dependent variable and only one independent variable when the other independent variables were not controlled. All nominal variables were dummy recoded in order to run statistical computation. In other words, school type was coded as 0 for public schools and 1 for private schools; school location was coded as 0 for rural areas and 1 for urban areas; grade was coded as 0 for teaching the third-year students and 1 for not; and gender was coded as 0 for male and 1 for female.

1. Relationships among the main independent variables and the dependent variable

   1-1: Is there a relationship between teachers’ perceived awareness of the BCT and teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

   As shown in Table 4.2, a substantial positive relationship existed between teachers' perceived awareness of the BCT and their perceptions of the impact of the BCT on their curricular planning and instruction \((r = 0.57)\). Teachers who were more aware of the formats, contents, and/or skills to be tested on the BCT perceived more impact of the BCT on their curricular planning and instruction. Over 32% of variance of teachers' perceptions of the impact of the curricular planning and instruction was explained by teachers' perceived awareness of the BCT \((r^2 = 0.32)\).
1-2: Is there a relationship between teachers’ perceived importance of the BCT and teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

Table 4.2 shows that the level of teachers’ perceived importance of the BCT was moderately and positively associated with their perceptions of the impact of the BCT on their curricular planning and instruction ($r = 0.39$). Teachers who were more likely to perceive the BCT as a high-stakes test or as a test used to make instructional decisions that immediately and directly affected them perceived more impact of the BCT on their curricular planning and instruction. Fifteen percent of variance of teachers' perceptions of the impact of the BCT on their curricular planning and instruction was explained by teachers' perceived importance of the BCT ($r^2 = 0.15$).

1-3: Is there a relationship between teaching experience and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

Teachers’ high school teaching experience was shown to have a negligible relationship with their perceptions of the impact of the BCT on their curricular planning and instruction ($r = 0.08$). (See Table 4.2)

1-4: Is there a relationship between educational background and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

Teachers’ educational background was positively low associated with how they perceived the impact of the PBT on their curricular planning and instruction ($r = 0.11$). Teachers who had earned a higher degree perceived more impact of the BCT on their
curricular planning and instruction (see Table 4.2). Only 1% of the variance of teachers' perceptions of the impact of the BCT on their curricular planning and instruction was explained by teachers' educational background ($r^2 = 0.01$).

1-5: Is there a relationship between teachers' perceived professionalism in teaching and teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

Table 4.2 showed that teachers' perceived professionalism in teaching was positively and moderately associated with their perceptions of the impact of the BCT on their curricular planning and instruction ($r = 0.37$). Teachers who reported that they would perceive more fear and the associated guilt, shame or embarrassment if their students did not perform as well as they expected on the BCT perceived more impact of the BCT on their curricular planning and instruction than teachers who had lower fear. Around 14 percent of variance of teachers' perceptions of the impact of the BCT on their curricular planning and instruction was explained by teachers' professionalism in teaching ($r^2 = 0.14$).

1-6: Is there a relationship between teachers’ gender and their perceptions of the impact of the BCT on their curricular planning and instruction?

Table 4.2 showed that a negligible relationship existed between teachers' gender and how they perceived the impact of the BCT on their teaching ($r = 0.05$).

1-7: Is there a relationship between the frequency of participation in in-service teacher education programs and the teachers’ perceptions of the impact of the BCT on their
curricular planning and instruction?

The frequency of in-service teacher education programs that teachers attended was positively low associated with how teachers perceived the impact of the BCT on their curricular planning and instruction \((r = 0.26)\). Teachers who attended more in-service teacher education programs in the past five years felt more impact of the BCT on their curricular planning and instruction (see Table 4.2). The proportion of variance of teachers' perceptions of the impact of the BCT on their curricular planning and instruction explained by participation in in-service teacher education programs was 7\% \((r^2 = 0.07)\).

In summation, a relationship existed among the dependent variable (teachers' perceptions of the impact of the BCT on their curricular planning and instruction) and the following main independent variables: teachers' perceived awareness of the BCT, teachers' perceived importance of the BCT, educational background, participation in in-service teacher education program, and teachers' professionalism in teaching. Nevertheless, a negligible relationship was found between the dependent variable and the following independent variables: gender and teaching experience.

2. Relationships among the rival independent variables and the dependent variable

2-1: Is there a relationship between school type and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

Table 4.2 showed a negligible relationship between school type and teachers’ perceptions of the impact of the BCT on their curricular planning and instruction \((r = -0.08)\).
2-2: Is there a relationship between school location and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

Table 4.2 shows that the relationship between school location and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction was negligible ($r = 0.03$).

2-3: Is there a relationship between grade and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

As shown in Table 4.2, the relationship between whether teachers were teaching the third-year of high school students and their perceptions of the impact of the BCT on their curricular planning and instruction was negligible ($r = -0.05$).

2-4: Is there a relationship between class size and teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

A positive low association existed between class size and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction as shown in Table 4.2 ($r = 0.10$). Teachers who reported they were teaching a class with a bigger size or more students perceived slightly more impact of the BCT on their curricular planning and instruction. The proportion of variance that teachers’ perceptions of the impact of the BCT on their curricular planning and instruction explained by class size was only 1% ($r^2 = 0.01$).
2-5: Is there a relationship between perceived students' learning attitudes and teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

The relationship between perceived students' learning attitudes and teachers’ perceptions of the impact of the BCT on their curricular planning and instruction was shown to be positively low (r = 0.21). If teachers perceived that their students would expect them to cover what would be tested on the BCT or if students had a higher expectation on their test performance, teachers would perceive more impact of the BCT on their curricular planning and instruction. Four percent of variance of teachers' perceptions of the impact of the BCT on their curricular planning and instruction was explained by perceived students' learning attitudes (r² = 0.04). (See Table 4.2)

2-6: Is there a relationship between teachers' perceived external pressure in teaching and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

The data indicated a low positive relationship between teachers' perceived external pressure in teaching and teachers’ perceptions of the impact of the BCT on their curricular planning and instruction (r = 0.27). Teachers who perceived more pressure to improve their students' test scores from different external sources, such as from their principals, school administrators, teachers, parents, the community, and/or the media, perceived more impact of the BCT on their instructional planning and delivery (see Table 4.2). The proportion of variance of teachers' perceptions of the impact of the BCT on their curricular planning and instruction explained by teachers' perceived attention/pressure from external pressure was 7% (r² = 0.07).
In summation, a relationship was shown among the dependent variable (teachers' perceptions of the impact of the BCT on their curricular planning and instruction) and the following rival independent variables: class size, perceived students' learning attitudes, and teachers' perceived attention/pressure from external pressure. However, a negligible relationship was found among the dependent variable and the following rival independent variables: school type, school location, and grade.

3. Relationships among the main independent variables and the rival independent variables

3-1: Is there a relationship among teaching experience and the rival independent variables?

Table 4.2 showed a positive moderate association between teachers' teaching experience and each of the following rival independent variables: 1) school type (r = 0.35), school location (r = 0.30), and whether teaching the third-year high school students (r = 0.30). Teachers’ teaching experience was shown to have a negative low association with class size that the teacher was teaching (r = -0.12). Teachers who were teaching in a private school, in the urban area, and were not teaching grade three had more experience in teaching junior high school. Teachers who had more teaching experience tended to have a smaller size of class. Variance of teachers' teaching experience explained by school type, school location, whether teaching the third-year high school students and class size was 12%, 9%, 9%, and 1% respectively ($r^2 = 0.12, 0.09, 0.09$ and $0.01$). Teaching experience was shown to have a negligible relationship with perceived students' learning attitudes ($r = 0.05$) and perceived external forces in teaching ($r = -0.02$).
3-2: Is there a relationship among educational background and the rival independent variables?

Teachers’ educational background was shown to have a positive low relationship with school type ($r = 0.14$) and whether teaching the third-year high school students ($r = 0.18$). Teachers' educational background had a negative low relationship with perceived students' learning attitudes ($r = -0.10$), teachers' perceived attention from external forces (-0.15) and class size ($r = -0.13$). Teachers who were teaching in a private school tended to have earned a higher degree than teachers who were teaching in a public school. Teachers who were teaching the third-year high school students had earned a higher degree than teachers who were not. Teachers tended to teach a smaller class than teachers who had only earned a B.A degree. The proportion of variance of teachers' educational background explained by school type, whether teaching the third-year high school students, perceived students' learning attitudes, teachers' perceived attention from external forces, and class size was only 2%, 3%, 1%, 2%, and 2% respectively ($r^2 = 0.02, 0.03, 0.01, 0.02, \text{ and } 0.02$). Teachers' educational background had a negligible relationship with school location ($r^2 = 0.05$). (See Table 4.2)

3-3: Is there a relationship among teachers' perceived awareness of the BCT and the rival independent variables?

A positive low relationship was shown between teachers' perceived awareness of the BCT and teachers' perceived external forces in teaching ($r = 0.21$). A negative low relationship existed between teachers' perceived awareness of the BCT and school type ($r = -0.16$) and school location ($r = -0.13$). Teachers who were more aware of the formats and
contents to be tested on the BCT were more likely to perceive external pressure in teaching. Teachers who were teaching in rural area or in a public school had more awareness of the BCT. Variance in teachers' perceived awareness of the BCT explained by perceived external pressure, school type and school location was 4%, 3%, and 2% respectively ($r^2 = 0.04, 0.03, \text{ and } 0.02$). Teachers' perceived awareness of the BCT had a negligible relationship with whether teaching the third-year high school students ($r = -0.03$), and class size ($r = -0.05$). Teacher' perceived awareness of the BCT showed no relationship with perceived students' learning attitudes ($r = 0$). (See Table 4.2)

3-4: Is there a relationship among teachers' perceived importance of the BCT and the rival independent variables?

How teachers perceived the importance of the BCT was positively and moderately associated with teachers’ perceived external pressure in teaching ($r = 0.35$). In addition, teachers' perceived importance of the BCT was shown to have a positive low relationship with school location ($r = 0.20$), whether teaching the third-year high school students ($r = 0.13$), and class size ($r = 0.12$). Teachers who perceived the BCT as a higher-stakes test were more likely to perceive pressure from external forces in their teaching. Teachers who were teaching in private school and were not teaching the third-year high school students tended to perceive the BCT as a higher-stakes test. Variance in the stakes of the BCT explained by perceived attention from external forces, school location, and whether teaching the third-year high school students was 12%, 2%, and 2% respectively ($r^2 = 0.12, 0.02, \text{ and } 0.02$). Teachers' perceived importance of the BCT was shown to have a negligible relationship with school type ($r = -0.07$) and perceived students' learning
attitudes (r = 0.05). (See Table 4.2)

3-5: Is there a relationship among teachers' perceived professionalism in teaching and the rival independent variables?

Table 4.2 showed that the relationship between teachers' perceived professionalism in teaching and perceived external pressure in teaching was positively and substantially associated (r = 0.56). In addition, a positive low relationship existed between teachers' professionalism in teaching and class size (r = 0.11). Teachers' professionalism in teaching was shown to have a negatively low relationship with school type (r = -0.13) and whether teaching the third-year high school students (r = -0.13). Teachers who perceived more pressure from external forces in their teaching were more likely to perceive fear, associated guilt, shame or embarrassment if their students did not perform well on the BCT. This also happened to teachers who were teaching classes with more students. In addition, teachers who were teaching the third-year high school students and were teaching in a public school were more afraid that how they were teaching was evaluated based upon the result of their students’ BCT performance. The proportion of variance of teachers' professionalism in teaching explained by teachers' perceived external pressure in their teaching, class size, school type, and whether teaching the third-year high school students was 31%, 1%, 2% and 2% respectively (r^2 = 0.31, 0.01, 0.02 and 0.02). Teachers' professionalism in teaching was shown to have a negligible relationship with school location (r = 0.01), perceived students' learning attitudes (r = 0.04).
3-6: Is there a relationship among gender and the rival independent variables?

The relationship between teachers' gender and class size was positively low correlated \( (r = 0.22) \). A positive low relationship also existed between teachers' genders and school location \( (r = 0.12) \). Teachers' gender was shown to have a negatively low relationship with whether teaching the third-year students \( (r = -0.10) \). Female teachers tended to teach a bigger class, teach in a private school, and teach the third-year students than male teachers did. The proportion of variance of teachers' gender explained by class size, school location, and whether teaching the third-year students was 4%, 1%, and 1% respectively \( (r^2 = 0.04, 0.01, \text{ and } 0.01) \). Teachers' gender had no relationship with school type \( (r = 0) \) and had a negligible relationship with students’ learning attitude \( (r = -0.06) \) and perceived external pressure in teaching \( (r = 0.02) \). (See Table 4.2)

3-7: Is there a relationship among teachers’ participation in in-service teacher education programs and the rival independent variables?

Teachers’ participation in in-service teacher education programs showed a positively moderate relationship with school location \( (r = 0.32) \). The data indicated that teachers’ participation in in-service teacher education programs had a positively low relationship with school type \( (r = 0.26) \). In addition, teachers’ participation in in-service teacher education programs and whether teaching the third-year students was positively and low correlated to each other \( (r = 0.20) \). The proportion of variance of teachers’ participation in in-service teacher education programs explained by school location, school type and whether teaching the third-year students was 10%, 7%, and 4% respectively \( (r^2 = 0.10, 0.07, \text{ and } 0.04) \). Teachers' participation in-service teacher education programs had a negligible
relationship with perceived students' learning attitudes \((r = -0.07)\), perceived external pressure in teaching \((r = -0.08)\) and class size \((r = 0.07)\). (See Table 4.2)
### Intercorrelations

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<th>X1</th>
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<th>X3</th>
<th>X4</th>
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<th>X7</th>
<th>X8</th>
<th>X9</th>
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<th>X12</th>
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<td>.30</td>
<td>.05</td>
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<td>.08</td>
<td>.05</td>
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<td>.15</td>
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<td>.11</td>
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<td>-.13</td>
<td>-.03</td>
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<td>.05</td>
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<td>-.08</td>
<td>.06</td>
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<td></td>
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<td>.22</td>
<td>.05</td>
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<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
<td>.26</td>
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<tr>
<td>Class size (X13)</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
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<td>.10</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
</tbody>
</table>

\(^a\): 0 = public; 1 = private  
\(^b\): 0 = Rural; 1 = Urban  
\(^c\): 0 = Yes; 1 = No  
\(^d\): 0 = Male; 1 = Female

Table 4.2: Correlation matrix of variables (n = 83)
Multiple Regression Analysis: Hypotheses 4-5

Multiple regression procedures were used to test hypotheses 4 and 5. The regression assumptions were tested in order to use multiple regressions. First, multicollinearity was examined. Multicollinearity occurs when one or more of the independent variables are substantially correlated with each other. Violating this assumption increases the standard errors of partial regression coefficients. In addition, the major consequence of multicollinearity is on significance tests and confidence intervals for partial regression coefficients. In order to detect multicollinearity, the following methods were used (Warmbrod, 1999).

1. When none of the partial regression coefficients is statistically significant but when the $R^2$ for the full model is significant, multicollinearity should be suspected.

2. The matrix of bivariate correlations (intercorrelations among independent variables) should be inspected. A frequent practice is to examine the bivariate correlations among the independent variables, examining coefficients around 0.8 or larger (Lewis-Beck, 1980).

3. Examine the "Tolerance" and VIF statistics, which is to regress each independent variable in the equation on all other independent variables and look at the $R^2$ values. High values (near 1.0) for Tolerance indicate that multicollinearity is not a problem; low values (near 0) indicate multicollinearity. Rule of thumb for examining VIF is that if a VIF value exceeds 10, there is reason for concern.

Second, residuals (errors) were checked. The following methods were used to examine whether any violation of assumptions of residuals happened (Warmbrod, 1999).
1. Overall plot: residuals should resemble observations from a normal distribution with a mean of zero.

2. Normal probability plot: residuals should fall approximately on a straight line.

3. Plot residuals against predicted values (Y'): satisfactory if overall impression is that of a horizontal band of residuals.

4. Plot residuals again each independent variable (Xk): satisfactory if overall impression is that of a horizontal band of residuals.

All of the above items were checked. No assumptions were violated.

4. Relationship among main independent variables and dependent variable with holding rival independent variables constant

The hierarchical analysis strategy was used to test hypothesis 4. By using the hierarchical model, the independent variables could be ordered with regard to logical causal priority. The hierarchical model allowed the determination of $R^2$ and semipartial correlation coefficients of each independent variable when it was added to the equation. Semipartial correlation was correlation between an independent variable and the dependent variable when the linear effects of the other independent variable(s) had been removed from the independent variable being considered. Squared semipartial correlation indicated the proportion of variance of the dependent variable accounted for by a given independent variable after another variable(s) had already been taken into account. For each independent variable entered, the increase in the variance in the dependent variable accounted for by that independent variable beyond the variance accounted for by the previously entered independent variables could be calculated ($R^2$ change). $R^2$ change, in
other words, indicated the proportion of variance of the dependent variable accounted for by a given independent variable after another variable had already been taken into consideration. Testing the significance of a squared semipartial correlation ($R^2$ change) was to test the increment in the proportion of variance in the dependent variable that the independent variable associated with the partial regression coefficient ($b_k$) accounted for ($H_0: R^2(k) \text{ change} = 0$).

4-1: If rival independent variables are statistically controlled, there will be no relationship among the main independent variables and teachers’ perceptions of the impact of the BCT on their curricular planning and instruction.

The hierarchical analysis using sets of independent variables was used to test hypothesis 4-1. As shown in Table 4.3, the set of rival independent variables (class size, perceived students' learning attitudes, whether teachers were teaching the third-year students, teachers' perceived external forces in teaching, school location, school type) was entered first and the set of main independent variables (perceived awareness of the BCT, teacher’s teaching experience, educational background, professionalism in teaching, gender, participation in in-service teacher education programs, and perceived importance of the BCT) was entered later. The dependent variable was teachers' perception of the impact of the BCT on their curricular planning and instruction.

When the set of independent variables was added, the proportion of variance in the dependent variable explained by the main independent variables after the rival independent had been controlled was 0.39 ($R^2$ change), which was statistically significant. That is, the main independent variable explained a significant proportion of the variance in the
dependent variable when the rival independent variables were controlled. The semipartial correlation of the dependent variable to the main independent variables was 0.62 (square root of 0.39), and teachers' perceived awareness of the BCT was significant in $R^2$ change. When one unit increases on the scale measuring "perceived awareness of the BCT," there is an estimated increase of 3.00 units on the dependent variable when all other independent variables are controlled. Since the sign of the partial regression coefficient is positive, then there is a positive relationship between perceived awareness of the BCT and teachers’ perceptions of the impact of the BCT on their curricular planning and instruction when all other independent variables are controlled. In short, if the set of rival independent variables was statistically controlled, no significant relationship existed between teachers’ perceptions of the impact of the BCT on their curricular planning and instruction and the following independent variables: 1) teachers' teaching experience, 2) educational background, 3) professionalism in teaching, 4) gender, 5) participation in in-service teacher education programs, and 6) perceived importance of the BCT.
<table>
<thead>
<tr>
<th>Variables</th>
<th>R²</th>
<th>R² change</th>
<th>b</th>
<th>B</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set of rival independent variables</td>
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<td>0.12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class size</td>
<td>1.56</td>
<td>0.07</td>
<td>0.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived students' learning attitudes</td>
<td>1.08</td>
<td>0.19</td>
<td>2.15*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching grade 3a</td>
<td>-0.26</td>
<td>-0.01</td>
<td>-0.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived attention from external forces</td>
<td>0.13</td>
<td>0.04</td>
<td>0.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School locationb</td>
<td>2.18</td>
<td>0.07</td>
<td>0.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School typec</td>
<td>1.93</td>
<td>0.04</td>
<td>0.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Set of main independent variables</td>
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<td>0.39*</td>
<td></td>
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</tr>
<tr>
<td>Perceived awareness of the BCT</td>
<td>3.00</td>
<td>0.46</td>
<td>4.65*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In-service teacher education programs</td>
<td>2.34</td>
<td>0.16</td>
<td>1.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Genderd</td>
<td>-0.76</td>
<td>-0.02</td>
<td>-0.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching experience</td>
<td>1.86</td>
<td>0.15</td>
<td>1.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational background</td>
<td>3.32</td>
<td>0.11</td>
<td>1.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived professionalism in teaching</td>
<td>0.65</td>
<td>0.20</td>
<td>1.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived importance of the BCT</td>
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<td>0.09</td>
<td>0.82</td>
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<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>43.99</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p< 0.05  
Adjusted R² = 0.41  
For Model: F = 5.37; P< 0.0001  
a: 0 = Yes; 1 = No  
b: 0 = Rural; 1 = Urban  
c: 0 = Public; 1 = Private  
d: 0 = Male; 1 = Female

Table 4.3: Regression of the dependent variable on rival independent variables and main independent variables (n = 83) (Hierarchical entry)
5. Relationships among the independent variables and the dependent variable

In order to test hypothesis 5, the simultaneous analysis strategy was used. In simultaneous model, all independent variables were entered into the regression equation in a single step.

5-1: The proportion of the variance of the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction explained by the linear combination of the independent variables (teaching experience, teachers’ educational background, teachers’ perceived awareness of the BCT, teachers' perceived importance of the BCT, teachers' perceived external pressure in teaching, teachers' perceived professionalism in teaching, school type, school location, grade, class size, and perceived students' learning attitudes,) is zero.

As shown in Table 4.4, the proportion of the variance of teachers' perceptions of the impact of the BCT on their curricular planning and instruction explained by the linear combination of the independent variables was 50%, which was statistically significant. That is, the proportion of the variance of teachers' perceptions of the impact of the BCT on their curricular planning and instruction explained by the linear combination of the selected independent variables is not zero.

5-2: The partial regression coefficient for each of the variables--teaching experience, educational background, teachers' perceived awareness of the BCT, teachers' perceived importance of the BCT, teachers' perceived external pressure in teaching, teachers' perceived professionalism in teaching, school type, school location, grade, class size, perceived
students' learning attitudes, teachers’ gender, and participation in in-service teacher education programs-- will not contribute significantly to the variance of the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction when the other independent variables are controlled.

In Table 4.4, perceived students' learning attitudes and teachers' perceived awareness of the BCT contributed significantly to the regression when the other independent variables were controlled. That is, the two independent variables, perceived students' learning attitudes and teachers' perceived awareness of the BCT, contributed significantly to explain the variance of the teachers' perceptions of the impact of the BCT on teachers' curricular planning and instruction.
<table>
<thead>
<tr>
<th>Variables</th>
<th>b</th>
<th>B</th>
<th>t</th>
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</thead>
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<td>Perceived students' learning attitudes</td>
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<td>0.19</td>
<td>2.96*</td>
</tr>
<tr>
<td>Perceived professionalism in teaching</td>
<td>0.65</td>
<td>0.20</td>
<td>1.89</td>
</tr>
<tr>
<td>Perceived attention from external forces</td>
<td>0.13</td>
<td>0.04</td>
<td>0.38</td>
</tr>
<tr>
<td>Perceived awareness of the BCT</td>
<td>3.00</td>
<td>0.46</td>
<td>4.65*</td>
</tr>
<tr>
<td>Perceived importance of the BCT</td>
<td>0.18</td>
<td>0.09</td>
<td>0.82</td>
</tr>
<tr>
<td>School location(a)</td>
<td>2.18</td>
<td>0.07</td>
<td>0.73</td>
</tr>
<tr>
<td>School type(b)</td>
<td>1.93</td>
<td>0.04</td>
<td>0.35</td>
</tr>
<tr>
<td>Gender(c)</td>
<td>-0.76</td>
<td>-0.02</td>
<td>-0.20</td>
</tr>
<tr>
<td>Teaching grade (3d)</td>
<td>-0.26</td>
<td>-0.01</td>
<td>-0.08</td>
</tr>
<tr>
<td>Educational background</td>
<td>3.32</td>
<td>0.11</td>
<td>1.15</td>
</tr>
<tr>
<td>Teaching experience</td>
<td>1.86</td>
<td>0.15</td>
<td>1.60</td>
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<tr>
<td>Class size</td>
<td>1.56</td>
<td>0.07</td>
<td>0.73</td>
</tr>
<tr>
<td>In-service teacher education programs</td>
<td>2.34</td>
<td>0.16</td>
<td>1.69</td>
</tr>
<tr>
<td>(Constant)</td>
<td></td>
<td>43.99</td>
<td></td>
</tr>
</tbody>
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\*p<0.05  
R\(^2\) = 0.50  
Adjust R\(^2\) = 0.41  
For Model: F = 5.37; P< 0.0001  
\(a\): 0 = Rural; 1 = Urban  
\(b\): 0 = Public; 1 = Private  
\(c\): 0 = Male; 1 = Female  
\(d\): 0 = Yes; 1 = No  

Table 4.4: Regression of the dependent variable on independent variables (n = 83)  
(Simultaneous entry)
Focus Group Interviews

Demographics of Participants

As to the sampling procedure for the focus group interviews, all interviewed teachers were purposefully selected from Taiwan junior high schools. Table 4.5 presents the descriptive data related to the interviewed teachers’ characteristics. Of the 16 teachers who participated the focus group interviews, over 68% were teaching in an urban school. Over 80% were female. Most of the teachers (75%) were teaching the third-year high school students. Over 93% had a BA degree and only one teacher had a MA degree. Almost one-third of the teachers had been teaching English in junior high school for 5 or less than 5 years and another one-third for more than 16 years. Over one-half of the teachers, on average, had 40-49 students in one class and the other 43% had 31-39 students in their class. One-half of the teachers had attended over 10 in-service education programs within the past five years.
<table>
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<tr>
<th>Characteristic</th>
<th>Number</th>
<th>Percentage</th>
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<td><strong>School location</strong></td>
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</tr>
<tr>
<td>Rural</td>
<td>5</td>
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<td>Urban</td>
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<td>68.7</td>
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<tr>
<td>Total</td>
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<td><strong>School type</strong></td>
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<td></td>
</tr>
<tr>
<td>Public</td>
<td>16</td>
<td>100.0</td>
</tr>
<tr>
<td>Private</td>
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<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
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<td></td>
</tr>
<tr>
<td>Male</td>
<td>3</td>
<td>18.8</td>
</tr>
<tr>
<td>Female</td>
<td>13</td>
<td>81.3</td>
</tr>
<tr>
<td>Total</td>
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<td>100.0</td>
</tr>
<tr>
<td><strong>Whether teaching Grade 3</strong></td>
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<td></td>
</tr>
<tr>
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<td>75.0</td>
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<tr>
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<tr>
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<td>100.0</td>
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</tr>
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</tr>
<tr>
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<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>100.0</td>
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</table>

Table 4.5: Characteristics of interviewed teachers (Continued)
Table 4.5: (Continued)

<table>
<thead>
<tr>
<th>Teaching experience</th>
<th>5 or under 5</th>
<th>6-10</th>
<th>11-15</th>
<th>16 or over 16</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5</td>
<td>4</td>
<td>2</td>
<td>5</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>31.3</td>
<td>25.0</td>
<td>12.5</td>
<td>31.3</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class size</th>
<th>31-39</th>
<th>40-49</th>
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<tbody>
<tr>
<td></td>
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<td>9</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>43.8</td>
<td>56.3</td>
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</table>

<table>
<thead>
<tr>
<th>In-service programs attended within the past 5 years</th>
<th>5 or under 5</th>
<th>6-9</th>
<th>Over 10</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5</td>
<td>3</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>31.3</td>
<td>18.8</td>
<td>50.0</td>
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</tbody>
</table>

General Factors Influencing Teachers’ Curricular planning and Instruction

Table 4.6 shows possible factors that influenced the teachers’ curricular planning and instruction. These factors include instructional time, textbooks, teachers' manuals, colleagues' suggestions, and references from supplementary materials.
Time arrangement

Over 68% of the interviewed teachers indicated that their curricular planning and instruction were constrained by time. They spent most of their time teaching the content of the textbook because their students' ability was tested by a district-wide test per month. The content of the textbook was focused in the test. The teachers expressed that the instructional time they were given, most of time, only enabled them to cover the content of every lesson in the textbook. They sometimes had to use their students’ extracurricular time for reviews or quizzes after finishing a lesson in order to promote their students’ learning or diagnose their learning. Some teachers indicated that they hardly had any activities other than lectures and drills in their teaching. One teacher interviewed said that time constraint was the major reason she was not able to have more communication-oriented activities.

I would have more aural and oral activities or supplement more information about how to use the language if I had more time. I really would like to involve more time, if I had, in communicative language teaching. And I believe by doing so, it will promote my students' English communication ability and motivate their learning interests. But, I just do not have time. (Female, M.A., three years of teaching experience)

A great portion of the teachers interviewed also claimed that they would have planned their lesson plans and instructed differently if they had had more time to teach.

Textbooks and Teachers' Manuals

A heavily reliance on textbooks to teach is ubiquitous in Taiwan junior high schools. Textbooks are by far the most available teaching materials teachers can obtain and rely on
for their teaching. As one interviewed teacher said,

   I just follow each lesson guideline of the textbook. I teach based upon the
   content of the lessons in the textbook. (Male, B.A., eight years of teaching
   experience)

One-half of the interviewed teachers expressed that textbooks were often used as a
guidebook to direct teachers what to teach and how to prepare their students for internal
and external tests. The interviewed teachers responded that they might have some
activities related to the content of each lesson to have their students practice what they had
learned if they had extra time after covering the content of the textbooks, but they said this
rarely happened. The time they were given to teach was just enough or sometime
insufficient to cover the content of the textbook.

Teachers’ manuals of the textbooks promoted teachers’ understanding of the proposed
changes of the curriculum and suggested how teachers could integrate the changes into
their teaching through sample activities. Almost 44% of the teachers responded that
teachers’ manuals guided their syllabus. One teacher interviewed explained why now she
relied so much on Teachers’ Manuals in her teaching.

   Following the teachers’ manuals to teach is efficient because the teachers’
   manuals, unlike the previous ones, are well organized. (Female, B.A.,
   twenty years of teaching experience)

**Colleagues’ suggestions and references**

Only slightly over 12% of the teachers said they took other teachers' suggestions into
consideration when they were planning their curriculum and classroom instruction. A
proportion of the teachers said that they might use supplementary materials and follow the
guidelines of the references as a part of their curricular planning and instruction.
<table>
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<td>Textbook</td>
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<td>Teachers' Manuals</td>
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</table>

Table 4.6: Factors that influence teachers’ curricular planning and instruction (n = 16)
(Multiple responses, not equal 100%)

Impact of the BCT on Teachers’ Curricular planning and Instruction

When asked how the BCT influenced their curricular planning and instruction, all of the teachers interviewed admitted that the BCT greatly influenced their curricular planning and instruction. It was because English education in Taiwan junior high schools was driven by measurement, especially by the joint public entrance examinations. The teachers said that they had to change their curricular planning and instruction to a certain extent in order to meet the new testing objectives. The major perceived changes of their curricular planning and instruction, derived from the new testing objectives, include the integration of four skills, a shift from grammar drills to real-life communication, and more concern of
students' learning interests and needs. (See Table 4.7)

Integration of four skills

Due to the new testing objectives, teachers were motivated to integrate listening and speaking into their teaching, especially listening, instead of only teaching reading and writing as the previous case. Teachers said the designated teaching material package, compiled and issued by the Ministry of Education, included textbook(s), teachers' manual(s), and tape(s). Listening earned more concern in the new teaching materials than the old ones. When asked to describe how they integrated listening and speaking into their classroom teaching, most of the teachers responded that they usually used the tapes to have their students practice listening and had role-plays or read aloud for oral activities. Teachers confessed that a few factors, such as time constraints, large class size, and lack of knowledge and sources regarding how to integrate communication-oriented activities, hindered them having more communication-based activities in their classroom teaching.

However, one interviewed teacher indicated that she was not sure whether her change was simply due to the reformed BCT or because of the new policy for junior high school graduates to enter secondary schools. This policy is called "Multiple Schemes for Entering Secondary Schools," which is promulgated by the Ministry of Education.

I try to integrate reading, writing, speaking and listening into my classroom teaching, especially listening. Some senior high schools require students to take listening and oral tests, developed by each individual senior high school, and use the test scores as a part of the admission criteria. (Female, B.A., two years of teaching experience)
Previously, under a single scheme policy, to take and pass the SSJEE was the only way for junior high school graduates to enter secondary schools. Since 2001, a multiple scheme policy has replaced the single scheme; that is, junior high school graduates can enter secondary schools via recommendation, special section, or examinations (the BCT). Although the BCT does not test students’ listening and/or speaking abilities, students are often asked to take listening and speaking tests, which are developed and administrated by each individual secondary school, when students are recommended or selected as candidates to enter secondary schools.

In addition, one of the interviewed teachers thought she was influenced more by the new textbooks than by the BCT. She thought old textbooks were focused on reading and writing whereas new ones emphasized listening and oral abilities. Her curricular planning and instruction were influenced more by such a change instead of simply by the change of the BCT.

I do not perceive the influence of the reformed BCT that much on my teaching. My teaching is changed mostly due to the new textbooks. The old textbooks stress reading and writing, whereas the new ones emphasize listening ability. The change of such teaching materials, in terms of textbooks, facilitates the change of my teaching. (Female, B.A., eight years of teaching experience)

**Shift from grammar drills toward real-life communication**

Based upon the interviewed teachers, the content of the BCT was more real-life oriented compared to the previous SSJEE. Over 87% of the teachers said that their teaching was, thus, shifted from drilling the students’ grammar competence toward promoting their communication competence in order to meet the BCT syllabus. An interviewed teacher described how she changed her teaching due to the reformed BCT.
I do not emphasize grammar explanation or sentence structures that much now in my teaching because the reformed entrance examination is focused more on testing students' contextual reading ability than grammar knowledge. My focus of English teaching is, thus, to promote my students' contextual reading ability. I encouraged my students to use the language for daily-life communication. For example, I have my students write their journals in English. (Female, B.A., thirteen years of teaching experience)

The responses from another teacher further explained how the reformed BCT changed teachers' teaching to be more real-life related.

I supplement some real-life related information in my teaching. In addition, I spend one-third of my instructional time in teaching listening. (Female, B.A., four years of teaching experience)

Focus on students’ interests and needs

Over 31% of the teachers considered it important to arouse students’ interests to learn the language. They would encourage students to use the language for their daily-life communication. Thus, when they were planning their curriculum and instruction, they considered their students’ interests and needs.
<table>
<thead>
<tr>
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<th>Percentage</th>
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</thead>
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<tr>
<td>Integrating four skills</td>
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</tr>
<tr>
<td>More real-life communication</td>
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</tr>
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<td>More focus on students interests and needs</td>
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</table>

Table 4.7: How teachers’ curricular planning and instruction were influenced by the BCT (n = 16) (multiple responses, not equal 100%)

Teacher Characteristics

As to whether teachers' characteristics or school characteristics influenced the teachers' curricular planning and instruction besides the BCT, teachers responded quite diversely. (See Table 4.8)

Education background and teaching experience

Only slightly over 31% of the teachers responded that how teachers perceived the impact of the BCT on their curricular planning and instruction were due to either their education background or their teaching experience. Their reasons varied. For example, one of the teachers said that the more experience she accumulated in teaching junior high school English, the more knowledge she had regarding how to plan her instruction. Another teacher indicated that he spent less time designing his syllabus when he was more
familiar with the junior high school English curriculum.

**Awareness of the BCT**

A great portion of the interviewed teachers responded that they were either not well informed of the BCT objectives or not aware of the test format or contents. Only about one-third of the interviewed teachers responded that they were aware of the BCT objectives although they were uncertain of the test format and contents. However, most of the teachers interviewed admitted that they would teach to the test if they were more aware of what would be tested in the BCT. In addition, narrowing of curriculum and instruction was more likely to happen if they were aware of test formats and contents.

**Teachers' personality and gender**

Twenty-five percent of the teachers responded that their personality had an influence on their curricular planning and instruction. They indicated that they designed their curricula differently based upon their personal interests and characteristics.

Most of the teachers indicated that their gender did not influence their curricular planning and instruction, except one teacher. The teacher explained that male teachers might plan their activities differently from female teachers. For example, male teachers might include more physical activities, such as sports, whereas female teachers might have more feminine activities, such as activities related to food or family.
Context Characteristics

Students’ learning attitudes

All of the interviewed teachers responded that their curricular planning and instruction were influenced by their students' abilities. They explained that students' abilities would influence students' learning attitudes and interests and, thus, their learning outcomes. Students’ learning attitudes would then influence both what and how the teachers taught from class to class. As one of the teachers said,

I teach basic skills to the students in lower-level class. But, I teach more deeply and broadly when I teach the students in higher-level class. It is also more likely for me to supplement extra information to the students with a higher ability or with an interest to learn the language. (Female, B.A., twenty years of teaching experience)

School policy

Over 56% of the teachers expressed that their school policy influenced their curricula and instruction. Teachers revealed they would teach listening skills because their school put an emphasis on promoting students’ listening abilities and tested students’ listening abilities regularly. An interviewed teacher explicitly pointed out how school policy influenced her teaching.

I teach according to my school-based syllabus. Now, I spend time teaching listening. My school emphasizes students' listening ability and tests students' listening ability regularly. (Female, M.A., three years of teaching experience)

Some teachers pointed out that their school placed the third-year students into different classes based upon their English abilities. They had to implement different syllabi to match the students’ abilities in order to motivate their students to learn. Some other teachers interviewed indicated that they had to teach some supplementary materials
because these materials were designated by their school.

**Grade**

One-half of teachers mentioned that their curricular planning and instruction would be varied based upon what grade they were teaching. As one of the teachers said,

I have more activities, such as role-play, songs, and games, while teaching the first-year and second-year students. However, I focus on promoting students’ contextual reading ability while teaching the third-year students because these students are getting closer to take the BCT. Contextual reading ability is emphasized in the BCT. (Female, B.A., thirteen years of teaching experience)

The other teachers also revealed that they cared more about their students' contextual reading ability when teaching the third-year students. In addition, they spent more time having their third-year students practice mock tests. Thus, they were not able to have aural or oral activities for the third-year students.

**Pressure from external forces and class size**

Most of the teachers indicated that they did not feel much pressure from external forces, such as pressure from parents or administrators. Two of the teachers revealed that, most of time, the pressure was from themselves. They expected their students to perform well on the BCT. Two of the teachers felt pressure from their principals. One of the teachers said that she sometimes felt pressure from other teachers when she compared her students’ performance with other students taught by her colleagues.

Most of the teachers did not feel the size of the class influenced their curricular planning and instruction. Only one teacher interviewed was concerned about the size of
the class. He mentioned that a big class influenced teaching and learning results in some ways. For example, he would not include too many communicative activities in class if he was teaching in a big class.
<table>
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Table 4.8: Teachers and context characteristics that influenced teachers’ curricular planning and instruction (n = 16) (multiple responses, not equal 100%)
CHAPTER 5

SUMMARY, DISCUSSIONS, IMPLICATIONS, AND RECOMMENDATIONS

The relational research method was used for the research in this study. The end sought by a relational study is to investigate relationships between variables in order to explain and predict (Miller, 1999).

Research Questions and Hypotheses

Research Questions

In order to facilitate the investigation of Taiwan junior high school English teachers' perceptions of the impact of the BCT on their curricular planning and instruction, the researcher formulated the following research questions.

1. What are the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction (the dependent variable)?

2. What are the relationships among the main independent variables (teachers' perceived awareness of the BCT, teaching experience, educational background, perceived importance of the BCT, gender, participation in in-service teacher education programs and perceived professionalism in teaching) and the dependent variable (teachers’ perceptions of the impact of the BCT on their curricular
planning and instruction)?

3. What are the relationships among the rival independent variables (school type, school location, grade, class size, perceived students' learning attitudes, and perceived external pressure in teaching) and the dependent variable?

4. What is (are) the intervening variable(s) of each of the main independent variables that influenced the dependent variable?

5. How much of the variance in the dependent variable can be explained by each of the independent variables?

Sub-questions and Research Hypotheses

The following sub-questions and hypotheses were established in order to answer the research questions and, thus, to fulfill the research purpose.

1. Relationships between each of the main independent variables and the dependent variable

1-1. Is there a relationship between perceived awareness of the BCT and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

1-2. Is there a relationship between perceived importance of the BCT and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

1-3. Is there a relationship between teaching experience and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?
1-4. Is there a relationship between educational background and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

1-5. Is there a relationship between professionalism in teaching and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

1-6. Is there a relationship between teachers’ gender and their perceptions of the impact of the BCT on their curricular planning and instruction?

1-7. Is there a relationship between participation in in-service teacher education programs and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

2. Relationships between each of the rival independent variables and the dependent variable

2-1. Is there a relationship between school type and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

2-2. Is there a relationship between school location and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

2-3. Is there a relationship between grade and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

2-4. Is there a relationship between class size and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

2-5. Is there a relationship between perceived students' learning attitudes and the teachers’ perceptions of the impact of the BCT on their curricular planning
and instruction?

2-6. Is there a relationship between perceived external pressure in teaching and the teachers’ perceptions of the impact of the BCT on their curricular planning and instruction?

3. Relationships among each of the main independent variables and the rival independent variables

3-1. Is there a relationship among teaching experience and the rival independent variables?

3-2. Is there a relationship among educational background and the rival independent variables?

3-3. Is there a relationship among perceived awareness of the BCT and the rival independent variables?

3-4. Is there a relationship among perceived importance of the BCT and the rival independent variables?

3-5. Is there a relationship among perceived professionalism in teaching and the rival independent variables?

3-6. Is there a relationship among gender in teaching and the rival independent variables?

3-7. Is there a relationship among participation in in-service teacher education programs and the rival independent variables?
4. Relationships among the main independent variables and the dependent variable with holding the rival independent variables constant

4-1. If the rival independent variables are statistically controlled, there will be no relationship among the main independent variables and the dependent variable.

5. Relationships among the independent variables and the dependent variable

5-1. The variance of dependent variable explained by the linear combination of the independent variables will be zero.

5-2. Each of the independent variables will not contribute significantly to the variance of the dependent variable when the other independent variables are controlled.

Population and Sample

The target population was junior high school English teachers in Taiwan. Since the Education Statistics of Taiwan did not provide a frame of the names of all junior high school English teachers, an estimated method based upon the total number of classes and average classes a teacher taught was used to calculate the target population. Cochran's formula (Cochran, 1977) was used to determine an appropriate sample size of 100 subjects for 95% confidence. Multistage sampling was used in the study. The first stage used a cluster random sampling technique to select schools randomly. Then, all English teachers teaching at the randomly selected schools were asked to respond to the survey questionnaire. In this study, 11 schools were selected and 151 teachers were asked to respond to the questionnaire.
As to the sampling procedure for the focus group interviews, all interviewed teachers were purposefully selected from Taiwan junior high schools. Three groups of teachers, with five participants in the first group, six in the second group, and five in the third groups, were interviewed.

Instrumentation

A survey questionnaire was developed by the researcher to obtain general data regarding teachers’ perceptions of the impact of the BCT on their curricular planning and instruction. In addition, a semi-structured interview topic guide for focus group interviews was developed to obtain detailed information about how teachers perceived the BCT impact on their curricular planning and instruction.

For the survey questionnaire, the first part of the questionnaire was related to how teachers perceived the impact of the BCT on their curricular planning and instruction. The second part of the questionnaire was about the factors commonly associated with the level of teachers’ perceptions of the impact of the BCT on their curricular planning and instruction. The third part of the questionnaire was related to teacher personal and context characteristics. Internal consistency reliability coefficients for the first part of survey questionnaire were .87 and .68 for the second part. A panel of experts and a field test established content validity. Thus, measurement error was established.

A focus group discussion guide regarding the questioning route, moderator’s guide, and discussion outline, based upon suggestions from Higgenbotham and Cox (1979) and Kureger (1994), was developed in advance to provide the direction for group discussion. A
field test was conducted to check appropriateness of the questions and interview guide.

Data Collection Procedures

The interviews were conducted in April 2001. Interview assent was obtained from all of the participants before the interviews. A focus group discussion guide was used to direct the interviews. The moderator took keynotes and the assistant moderator took detailed notes throughout the discussion, including notes on the participants’ body language. All of the interview sessions were tape recorded in order to avoid missing the interviewees’ comments.

The survey was conducted from May to June 2001. The teaching and administrative deans of the selected schools were asked to help distribute the questionnaires to each of the English teachers in their schools and to collect the data. Fifteen percent of the subjects from the non-respondents were randomly selected and contacted individually to complete the questionnaire in order to control the non-response error by making a statistical comparison between them and the respondents.

Data Analysis

Bivariate correlation analysis was used to determine the direction and magnitude of the relationships between each of the independent variables and the dependent variable. Multiple regression analyses, using a hierarchical entry strategy and a simultaneous entry strategy, were used to further examine the relationships among the independent variables and the dependent variable.
The note-based content analysis was used to analyze the focus group interviews. In order for analysis to be verifiable, the data stream began with field notes and recordings that were taken during the interviews, continued with the oral summary of key points during the interviews, went into the debriefing with the moderator team immediately following the interviews, and also included the electronic recording with the possibility of a translation of the interviews (Krueger, 1994). Truthfulness was used to check whether the analysis was appropriate. The interview report was sent to each of the participants to ask their comments. A peer researcher helped to check the counting of frequency and the content analysis.

Summary of Findings

Teachers’ Perceptions of the Impact of the BCT on Their Curricular Planning and Instruction

When asked to what extent the BCT was perceived to influence their curricular planning and instruction, all of the teachers interviewed admitted that the BCT influenced their curricular planning and instruction because English education in Taiwan junior high schools was driven by measurement, especially by the joint public entrance examinations. The teachers pointed out that they had to change their curricular planning and instruction to a certain extent in order to meet the new testing objectives. As shown on Table 4.7, the major perceived changes of their curricular planning and instruction, derived from the new testing objectives, were:
Integration of four skills

Teachers integrated reading, writing, speaking, and listening teaching into their classes, especially listening. All of the teachers indicated that they included listening activities in their instruction. However, the reason given was that the student's listening abilities were assessed by a united district-wide test once per month. In addition, some senior high schools required students to take listening and oral tests developed by each individual senior high school and used the test scores as a part of the admission criteria. The BCT had a greater emphasis on contextual reading ability. Such a change also motivated the teachers to include activities related to contextual reading their curricular planning and instruction in their classroom syllabus.

A shift from grammar drills toward real-life communication

A crucial change of the BCT from the previous tests was testing students’ communication competence rather than grammar competence. Over 87% of the teachers interviewed indicated that the content or format of the BCT was more real-life oriented compared to the previous SSJEE. Thus, their teaching was shifted from drilling students’ grammar knowledge toward promoting their communication ability. Given that contextual reading ability was focused on the BCT, teachers admitted that they spent quite a lot of time teaching contextual reading skills, especially when they were teaching the third-year students.
Relationships among the Independent Variables and the Dependent Variable

Differences existed between the literature and this study in explaining how teacher characteristics and context characteristics influenced teachers' perceptions of the impact of public examinations on their curricular planning and instruction. In this study, teachers' perceived importance of the BCT ($r = 0.39$), teachers' perceived professionalism in teaching ($r = 0.37$), teachers' perceived external forces ($r = 0.27$), and teachers' participation in in-service teacher education programs ($r = 0.26$) were found to have low to moderate relationships with teachers' perceptions of the impact of the BCT on their curricular planning and instruction when the other independent variables were not controlled (See Table 4.2). However, these variables did not contribute significantly to predict how teachers' perceptions of the impact of public examinations influenced their curricular planning and instruction when the other independent variables were controlled (See Tables 4.4). Thus, the relationships might be due to the other intervening independent variables. Nevertheless, this study provided evidence that teachers' perceived awareness of the BCT and perceived students' learning attitudes contributed to explain how teachers' perceptions of the impact of public examinations influenced their curricular planning and instruction.

Teachers' perceived awareness of the BCT

Findings from this study showed a substantial relationship between teachers' perceived awareness of the BCT and teachers' perceptions of the impact of BCT on their curricular planning and instruction ($r = 0.57$) when the other independent variables were not controlled (See Table 4.2). When the dependent variable was regressed on the main
independent variables, the proportion of variance explained by the set of main independent variables was 0.39, which was statistically significant. Teachers’ perceived awareness of the BCT was significant in $R^2$ change (See Table 4.3). As shown in Table 4.3, teachers' perceived awareness of the BCT contributed significantly to predict the variance of the teachers' perceptions of the impact of the BCT on their curricular planning and instruction when the other independent variables were controlled. Thus, the relationship between teachers' perceived awareness of the BCT and teachers’ perceptions of the impact of the BCT on their curricular planning and instruction was not due to any other measured independent variable.

Alderson and Wall (1993) pointed out when teachers were more aware of the formats, skills and/or contents to be tested in public examinations, their curricular planning and instruction were more likely to be influenced by the washback effect of public examinations. One result derived from this study was in accordance with this literature. That is, when teachers are more aware of public examinations, specifically the formats, contents, and/or skills to be tested, their curricular planning and instruction are more likely to be influenced by public examinations.

**Students' learning attitudes**

Recent literature indicated that tests were commonly assumed to bring about some change in motivation and, thus, in behavior associated with teaching and learning. Students, particularly those with high orientation toward success or toward avoidance of failure in the public examination, would expect their teachers to cover what would be tested. Students' learning attitudes, thus, may influence teachers' curricular and
instructional knowledge (Beattie, 1995).

This study, in concordance with this literature, presents significant evidence regarding how students’ learning attitudes may influence teachers’ perceptions of the impact of the BCT on their curricular planning and instruction. A positive relationship ($r = 0.21$) existed between perceived students' learning attitudes and teachers’ perceptions of the impact of the BCT on their curricular planning and instruction when the other independent variables were not statistically controlled (See Table 4.2). As shown in Table 4.4, as the independent variables regressed on the dependent variable, perceived students' learning attitudes contributed significantly to explain the variance of the teachers’ perceptions of the impact of the BCT on teachers’ curricular planning and instruction when the other independent variables were statistically controlled. Teachers who perceived that their students expected to perform well in the BCT perceived more impact of the BCT on their curricular planning and instruction.

As explained by the teachers interviewed, students' learning interests and abilities were interwoven and had a significant influence on their learning attitudes. Students with a negative learning attitude were less motivated to perform well on the BCT compared to those who had a positive learning attitude. Students who were highly perceived to be motivated to succeed in the BCT were more likely to expect their teachers to promote their testing skills and cover as much content related to the BCT as possible. Thus, teachers perceived more impact of the BCT on their curricular planning and instruction. This phenomenon was especially obvious to five of the interviewed teachers who were teaching at a school in which students were assigned to different classes based upon their English competence. They reported that they would teach more broadly and supplement more
test-related materials when teaching higher-level classes.

**Intervening Variable(s) of the Main Independent Variables**

Perceived students' learning attitudes and time management were found to be as two intervening variables of the independent variables that influenced teachers' perceptions of the impact of BCT on their curricular planning and instruction.

**Perceived students' learning attitudes**

As shown in Table 4.4, perceived students' learning attitudes, contributed significantly to explain the variance of the teachers’ perceptions of the impact of the BCT on teachers’ curricular planning and instruction when the other independent variables were statistically controlled. All of the interviewed teachers also revealed that students’ learning attitudes influenced their perceptions of the impact of the BCT on their curricular planning and instruction (See Table 4.8).

**Time management**

As shown in Table 4.6, almost 70% of the interviewed teachers indicated that their curricular planning and instruction were constrained by time. Time management, coming into its own as an important variable influencing teachers’ perceptions of the impact of the BCT on their curricular planning and instruction in this study, could be treated as a contextual factor, which was emerged as a main theme to influence how teachers perceived the impact of the BCT on their curricular planning and instruction.
According to the interviewed teachers, high school English teachers were given, on average, three to four hours each week to teach. The teaching was quite textbook-oriented because the textbooks were regarded as a teaching guide directing teachers in what to teach and how to help their students prepare for the BCT. The instructional time teachers were given was just sufficient to cover major sections of the textbooks. They sometimes had to “illegally” use students’ extracurricular time to supplement textbook-based learning, such as quizzes and reviews, in order to promote their students’ familiarity with the content and test format. As all of the interviewed teachers revealed that their curricular planning and instruction were influenced by the BCT to a great extent, it was not hard to understand that their main objective of English instruction was to prepare students for the BCT.

Variance in the Dependent Variable Explained

Table 4.4 showed that the proportion of the variance of teachers' perceptions of the impact of the BCT on their curricular planning and instruction explained by the linear combination of the independent variables was 50%, which was statistically significant. As shown on table 4.2, teachers' perceived awareness of the BCT contributed to explain 32% (r = 0.57) of the variance of the teachers' perceptions of the impact of the BCT on their curricular planning and instruction (the dependent variable). Perceived students' learning attitudes contributed to explain 4% (r = 0.21) of the variance of the dependent variable.
Discussion

Many studies has pointed out that public examinations might affect some aspects of teaching while not affecting others (Alderson and Wall, 1993; Blewchamp, 1994), or they might affect some teachers in different ways than others (Alderson and Hamp-Lyons, 1996). Findings from this study present the following degree of washback effect in the few areas teaching in Taiwan junior high school English education as a result of the reformed BCT.

Washback on Teaching

In Taiwan, it is often assumed that washback exists to influence teaching and learning to certain extent whenever a new examination is introduced. Findings from this study further support this assumption. That is, the reformed BCT still plays an influential role in Taiwan junior high school English teaching because Taiwan junior high school education is greatly driven by measurement, particularly public examinations. Based upon the teachers interviewed, the new BCT syllabus affects teachers in numerous ways.

A crucial influence is that teachers integrate speaking and listening into their classroom teaching. All of the teachers interviewed claimed that they used to teach only reading and writing skills, but now they included oral and aural activities in their teaching. However, such a change might not be simply due to the new BCT syllabus because the reformed BCT does not directly test students’ listening and speaking abilities. The change may be due to the change of textbooks and the whole policy for junior high school students to enter secondary schools.
In Taiwan, junior high school teachers tend to rely on textbooks and other curriculum materials, such as workbooks or Teachers' Manuals, as sources for their lesson plans. The textbooks, compiled and issued by the Ministry of Education, are often adopted as a curriculum, in terms of directing teachers what to teach. One dramatic change of the new textbooks, due to the high school curriculum innovation in English education, is that speaking and listening earn more concerns. Given such an important role that the textbooks have played in junior high school English education, the change of textbook contents explains why teachers would include listening and speaking in their teaching.

The whole policy change for junior high school students to enter secondary schools holds the other reason for why teachers would include oral and aural activities in their classroom teaching. According to the new policy for junior high school students to enter secondary schools, which is called "Multiple Schemes," promulgated by the Taiwan Ministry of Education, junior high school students can be assigned to secondary schools via special selections, recommendations, and test scores of the BCT, unlike the previous case in which junior high school students were assigned to secondary schools only based upon their entrance examination scores. Most secondary schools require those students who are specially selected or recommended to enter secondary schools to take aural and/or oral tests and use the test scores as a part of admission criteria. Teachers are motivated to teach speaking and listening in order to help their students to enter secondary schools via a special selection or recommendation.

Another crucial change of teaching, as a result of the reformed BCT, is a shift from grammar-based teaching toward more communication-oriented teaching. Message focus is central to the communicative methodology while reading is taught. Thus, the teachers
interviewed claimed that they stressed context instead of structures while teaching reading, in terms that they cared more about their students' contextual competence rather than grammatical competence. Despite of oral and aural skills untested, a multiple choice test format is adopted in the reformed BCT. How students' communicative competence can be assessed on a paper and pencil test within a multiple choice test format is questionable. Although most of the teachers interviewed claimed that they followed the new testing objectives by adherence to a more communication-based syllabus, it would be interesting to observe to what extent the new syllabus is actually implemented in the classrooms.

The other influence of the BCT on teaching is that students' learning interests and needs earn more concerns when teachers are planning their classroom syllabus. According to the teachers interviewed, students' learning attitudes are associated with their learning interests. Promoting students' learning interests facilitates positive learning attitudes and, thus, promotes learning results, including their performance in the BCT.

All of these changes on teaching due to the reformed BCT, or more correctly the innovated curriculum package, including the curriculum standards, instructional materials and testing objectives, seem to be associated with positive washback. Nevertheless, the extent to which this new examination has changed teaching is quite superficial. In other words, the BCT may dramatically change the contents teachers teach, but not the way they would teach. That is why most teachers' teaching activities are still test-oriented.

Washback on Teachers' Perceptions

All of the teachers interviewed claimed that they had to make a change of their teaching in order to meet the new testing objectives. However, findings from this study do
not provide enough evidence that teachers would change their perceptions regarding how
to teach. Teachers may have a positive perception toward the innovated curriculum,
including teaching materials and the new testing objectives, but yet find it hard to
implement it in their classroom. Some of the teachers interviewed claimed that they were
not sure of the new test objectives, particularly the test format and contents. Some others
claimed that they did not have knowledge about how to implement the new curriculum
even though they were aware of the innovated curriculum and testing objectives. They
lack opportunities to develop their professional competences. In this case, teachers do not
know how to align the new curriculum with their lesson plans. They, therefore, intend to
rely on the curriculum materials, especially the textbooks, as sources for their lesson
planning and teaching.

The high-stakes nature of the BCT drives teachers' perceptions of teaching in the
direction of teaching for what is required in the examination. That is why a substantial
relationship is found between teachers' perceived awareness of the BCT and how they
perceive the impact of the reformed BCT on their curricular planning and instruction.
When teachers are more aware of the format, skills, and/or content to be tested in the BCT,
they are more likely to teach to the test. Teaching activities are designed on a basis of
reflecting the test format and contents. Teaching to the test, in this case, leads to the
narrowing of curriculum and instruction. In other words, contents or skills untested will
not be included in the teaching syllabus.

Such perceptions of teaching also affect teachers’ curricular and instructional
knowledge across students. If students, particularly those who are highly oriented toward
success in the BCT, expect their teachers to teach what will be tested, teachers perceive
more impact of the BCT on their curricular planning and instruction. According to the teachers interviewed, they would teach more deeply and broadly to the students in higher-level class because these students often have a higher expectation to a success in the BCT and, thus, would expect their teachers to cover as much information related to the test as possible, particularly the contents, skills, and/or format to be tested.

A consequence of BCT-driven instruction leads to instructional time arrangement for the test as well. As all of the interviewed teachers revealed, their curricular planning and instruction were influenced by the BCT to a great extent and their main objective of English instruction was to prepare students for the BCT. Teachers, especially those sensible ones, are very careful to arrange their classroom activities to achieve the requirements of the revised examination syllabus.

Whether change is desirable, particularly in cases where successful models from one context are imported into another new context, teachers are key players. According to Morris (1988), why innovations do or do not have their intended effects places primary emphasis on the ability of change agent to overcome the initial resistance of organizational members to change. What teachers would like to change is not necessarily the same as what they actually would do in their classroom (Cheng, 1995). The intention to bring in positive washback simply by a change of the examination format or contents will not necessarily bring out an expected outcome. Other factors that retrain implementation should be taken into consideration before an innovated curriculum is introduced. As Cheng (1999) pointed out,

If one expects practitioners to change themselves and their students, an environment conductive to such change must be fostered. The teaching context, school environment, messages from the administration, and
expectations of other teachers facilitate or detract from the possibility of change (p. 269).

Implications

The frontloaded curriculum alignment is practiced in Taiwan junior high school English education. That is, the curriculum is developed first. The test is designed to measure how students have learnt based upon the curriculum. One of problems with frontloading alignment is the poor test quality, in terms of lack of validity and reliability. The main goal of the innovated curriculum in Taiwan junior high school English education is to promote a communicative syllabus in classroom teaching and learning. The BCT should be written to test students' communicative competence on the basis of the innovated curriculum. Due to its multiple choice format and excluding oral and aural test, how students' communicative competence can be assessed is questionable. Thus, finding effective ways to include communicative language goals in oral assessment should increase the match of the curriculum and test. "If a new test or assessment instrument is seen as particularly valid, its availability may exert influence on the statement of desired outcomes and the elaboration of the curriculum" (Valette, 1994, p. 10). Positive washback is more likely to occur when a curriculum and test are highly matched.

Recommendations

Based upon the information found in this study, the following recommendations are made for different educational parties.
Provide Teachers with Professional Development Opportunities

Although new curriculum standards related to high school English teaching, developed by the Ministry of Education in Taiwan, have been put into practice for several years, many teachers perceive that they lack knowledge regarding how to align their lesson plans with the new curriculum standards. Given such concern, the Ministry of Education in Taiwan should provide teachers with extensive professional development to understand the new academic standards and how to incorporate them into teachers' lesson plans and instructional practices.

In addition, the Ministry of Education in Taiwan should provide teachers with more training on how to use test data to critique and improve their instruction. These goals can be achieved through the coordination of the normal universities, which provide most of pre-service and in-service teacher education programs. Without professional development aimed at understanding and using test data, teachers might not know how to use this information to improve their instruction.

Change Teacher Monitoring and Evaluation Policy

Evaluation on teachers may engage in a more systematic approach to monitoring and evaluating teacher performance. However, if administrators in the evaluation overemphasize testing competitions, it may lead teachers simply to teaching for improving test scores instead of students’ learning. Thus, school administrators should work with teachers to help teachers identify their instructional weaknesses with the test data instead of using test results as awards or sanctions to evaluate teachers’ instruction.
Practice Mix-ability Grouping to Group Students

Some of junior high schools in Taiwan still adopt “achievement grouping” with a belief that achievement grouping may facilitate teaching and learning although this policy has earned a lot of concerns by the public, especially by the educational parties. Achievement grouping is the assignment of students to classes or instructional groups based upon students’ level of ability or achievement. In other words, students with same or similar academic achievement are assigned to the same class.

As indicated by the interviewed teachers, achievement grouping more negatively impacted teaching and learning than mix-ability grouping. Students who are assigned to a lower level course are more likely to generate a negative image on their learning and, thus, are less motivated to succeed in the BCT compared to those in a higher-level class. All of the interviewed teachers, particularly those who were teaching in a school practicing achievement grouping, admitted that students’ learning attitudes influenced their perceptions of the impact of the BCT on their curricular planning and instruction. They had a higher expectation for higher-level students to perform well in the BCT and were more likely to teach to the test. Such a teaching attitude is more or less associated with overemphasized testing competitions in Taiwan’s educational system. In order to avoid a negative teaching attitude and learning attitude derived from the achievement grouping policy, mixed ability grouping should be broadly practiced.
Integrate Assessment into Classroom Evaluation

Opponents of high-stakes testing often argue that it encourages teaching to the test and negatively affects students learning. An obvious practice of teaching to the test is often referred to as a narrowing of curriculum and instruction. Narrowing of curriculum and instruction is not easily identified as appropriate or inappropriate. For example, a positive effect is that it guides course of study revisions and lesson planning by emphasizing certain areas of the curriculum or, in other words, it helps teachers sharpen their focus. However, a negative effect is that it decreases the breadth or depth of content and activities to which students are exposed because the test does not emphasize the content or skills that some activities address (Legislative Office of Education Oversight, 2000). Some interviewed teachers claimed that they interrupted their regular classroom instruction in the weeks prior to the test's administration to prepare their students. If the preparation is focused their instruction on the format of the test questions instead of on the underlying learning objectives, the consequence may be higher test scores without improved student learning. Such interruption of classroom instruction is inappropriate. Thus, teachers should integrate assessment into their classroom evaluation in order to avoid negative effects of teaching to the test, which emphasizes the test format rather than the content and thus might lead to inflated score gains without corresponding improvement in students’ mastery of the knowledge and skills being tested.

Conclusions

This study has concordant findings to recent literature. Teachers’ different perceived levels of awareness of public examinations and perceived students’ learning attitudes have
a crucial influence on teachers’ perceptions of the impact of public examinations on their curricular planning and instruction. However, several discrepant findings from this study further support that washback is quite context-oriented and complex. Simply examining one factor without a covariance analysis or examining the phenomenon in one context is not capable of explaining critical washback issues, such as how and why washback phenomenon influences some teachers but not others. Thus, further empirical studies should be conducted to provide more insights into the nature of this educational phenomenon across different factors and research contexts.

Need for Further Research

Further research is needed of “a phenomenon on whose importance all seem to be agreed, but whose nature and presence have been little studied” (Alderson and Wall, 1993, p. 115). Given the complexity of the washback phenomenon, the following areas are needed for further research.

Long-Term Research Programs Needed to Further Examine the Nature, Scope and Limits of Washback of Public Examinations

This study was limited to the study of Taiwan high school English teachers’ perceptions of the impact of the BCT on their curricular planning and instruction when the BCT was initiated. No follow-up or longitudinal studies were conducted due to a constraint of time and cost. Educational researchers are recommended to conduct extensive longitudinal studies on the washback effect of the BCT in order to evaluate in what way and to what
extent the BCT influences teachers’ curricula over a period of time for the subject. The longitudinal studies might help to explain how washback of public examinations influences teachers’ instruction. It is also recommended that other qualitative methods, such as classroom observations, should be included in the longitudinal study in order to explain to what extent washback actually occurs to influence classroom teaching.

A Need for Replications of the Study on Different Subjects and Populations in Order to Increase Generalizability

Future research should gather evidence from different populations and high-stakes tests so that the phenomenon of washback of public examinations can be understood more thoroughly. Some studies have suggested that student factors contribute to explaining how washback of public examinations influences how students learn and how different types of learning attitudes might indirectly influence the way teachers teach (Cheng, 1999). Other studies pointed out that studies of washback effect on different language tests (such as TOEFL, MELAB, IELTS, TSE), across settings, across cultures, and across language backgrounds, increase future generalizability regarding washback effect of public examinations on language education (Saif, 1999). Replication may provide greater generalizability regarding washback of public examinations.

Further Studies to Investigate Other Variables

A high proportion of the interviewed teachers indicated that they were concerned about their students’ abilities when developing their lesson plans. Another noticeable proportion of interviewed teachers revealed that the constraint of time and school policy had an
influence on their curricular planning and instruction. Therefore, other variables, including students’ abilities, time and school policy, should be included in future studies.

**Definition of the Nature of Urban and Rural Schools**

This study did not discover if the location of a school contributed to explaining how washback of public examinations influenced teachers' curricular planning and instruction. One possible reason may be due to no predefinition of urban and rural schools. Thus, further studies should apply certain criteria, such as the size of the population, to identify schools as urban or rural in order to obtain more unified data.
REFERENCES


APPENDIX A

List of Panel of Experts for Content and Face Validity
Teaching English as a Second and Foreign Language Experts

1. Dr. Keiko Samimy
   Associate Professor, Dept. of Foreign/Second Language Education
   The Ohio State University
   223 Arps Hall 1945 N. High St.
   Columbus, OH 43210

2. Dr. Charles Hancock
   Professor, Dept. of Foreign/Second Language Education
   The Ohio State University
   149 Arps Hall 1945 N. High St.
   Columbus, OH 43210

Instrumentation Experts

1. Dr. Larry Miller
   Professor, Department of Human and Community Resource Development
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   Columbus, OH 43210

2. Dr. Barbara Ludwig
   Professor, Chair OSU Extension Education
   The Ohio State University
   2120 Fyffe R., 3 Agriculture Administration Building
   Columbus, OH 43210

3. Dr. Joe Gliem
   Associate Professor, Department of Human and Community Resource Development
   The Ohio State University
   2120 Fyffe R., 208 Agriculture Administration Building
   Columbus, OH 43210

4. Lewis R. Horner
   Research Associate
   Center for Survey Research
   The Ohio State University
   Derby Hall Room 3045
   154 N. Oval Mall
   Columbus, OH 43210
Junior High School English Instruction Experts

1. Ms. Yi-Fang Ko
   MA, Dept of Second/Foreign Language Education
   The Ohio State University
   Qingshui Junior High School, English Instructor
   250 Aofeng Rd, Qingshui, Taichung, Taiwan, ROC

2. Ling-Miao Yeh
   Ph.D. student, Dept. of Second/Foreign Language Education
   The Ohio State University
   Junior High School English Instructor
APPENDIX B

Sample Cover Letter to Panel of Experts
Dear Colleague,

I am currently in the process of ascertaining the face and content validity of a survey and a focus group interview instruments I am going to use for collecting data for my doctoral dissertation. My dissertation topic is "Washback of Public Examinations: Impact of the Basic Competence Test on Taiwan Junior High School English Teaching." I really appreciate your serving on my panel of experts to help determine the face and content validity of my survey and focus group interview instruments.

The questionnaire and focus group interview questions will be administered to the junior high school English teachers in Taiwan. The purpose of this study is to investigate how junior high school English teachers in Taiwan perceive the impact of the Basic Competence Test, a public examination used to select students for the secondary schools, on their curricular planning and classroom instruction.

The survey questionnaire consists of three parts. Part I contains statements about teachers' perceptions regarding the impact of the BCT on their curricular planning and instruction in six dimensions: syllabus design, teaching contents, teaching methods, materials, activities, time arrangement/activities, and assessment. Part II contains statements about factors commonly associated with teachers' perceptions of their curricular planning and instruction. Part III is related to teachers' personal characteristics and their school/context characteristics.

I have developed a special form for your use in commenting on the items I have developed for the instruments. As you review the proposed items, please feel free to comment based upon the following criteria:

**Face validity:** Does the instrument "look like" it is measuring what it is supposed to measure?

**Content validity:** Are the items representative of concepts related to the dissertation topic?
Clarity: Is each item in the instruments clear? Is the language/wording appropriate?

Format: Logical flow? Suggestions?

Other: Please make any additional suggestions as warranted.

The scaling technique being used for the survey questionnaire is based on Likert-type Scale method. Subjects will be asked to indicate the level of their certainty of their agreement or disagreement by placing their response to the item on a six-point scale. Please delete those items you feel inappropriate.

If possible, please return the enclosed expert form with your comments to me by March 11, 2001. If you have any questions, please contact me at chen.358@osu.edu. Thank you in advance for your great help.

Sincerely,

Lih-Mei Chen
Doctoral Candidate
Department of Second/Foreign Language Education
The Ohio State University
47 Curl Dr. 01-B, Columbus, OH 43210
APPENDIX C

Sample of Content Validation Form
Survey Questionnaire Item Content Validation Form

Directions: On the following pages are listed 70 items intended to investigate junior high school English teachers’ perceptions of the impact of the Basic Competence Test (BCT) on their curricular planning and instruction in Taiwan. In this survey questionnaire, the term “the reformed tests” refers to the BCT. Please rate each item based on two criteria: 1) the appropriateness of the item in representing the topic, and 2) the clarity of the meaning of the item. Please circle your response.

1) Is the item appropriate?

   YES = Appropriate
   NO = Not Appropriate

2) Is the item clear?

   YES = Meaning Clear
   NO = Meaning Unclear

If the item is appropriate but unclear, please reword the item on the blank lines below the item. If the item is not appropriate and not clear, please indicate the item should be deleted from the questionnaire by writing the word "Delete" on the blank lines.
### Part I: Impact of the Basic Competence Test on Teachers' Curricular Planning and Instruction.

<table>
<thead>
<tr>
<th>Activities/Time arrangement</th>
<th>APPROPRIATE?</th>
<th>CLEAR?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The reformed tests motivate me to implement the activities which are able to promote my students’ skills for the reformed tests.</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td></td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>2. I rarely use specific teaching activities to promote my students’ language skills just for the reformed tests.</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td></td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>3. How I perceive the way of time allotment would be different if the reformed tests were cancelled.</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td></td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>4. I arrange my classroom activities carefully in order to achieve the requirements of the revised syllabus with an aim to help my students perform well on the reformed tests.</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td></td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>5. I spend more time instructing grammar structures than the time instructing communication skills because I think grammar is more likely to be tested in the reformed tests.</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td></td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>
6. I spend certain time instructing students test-taking strategies for the reformed tests, especially when the time for students to take the reformed tests is getting closer. | APPROPRIATE? | CLEAR? |
<table>
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<tbody>
<tr>
<td>YES</td>
<td>NO</td>
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</table>

7. I arrange my classroom activities mostly based upon different factors, such as my teaching experience or students' language ability, instead of just based upon the objectives of the reformed tests. | APPROPRIATE? | CLEAR? |
<table>
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<th></th>
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<tbody>
<tr>
<td>YES</td>
<td>NO</td>
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</tbody>
</table>

**Methods**

8. I would selectively use the efficient methods, such as those suggested in the Teachers' Manuals, to develop my students’ skills that are more likely to be tested on the reformed tests. | APPROPRIATE? | CLEAR? |
<table>
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<tr>
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<tbody>
<tr>
<td>YES</td>
<td>NO</td>
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</tbody>
</table>

9. I would change my teaching methods for helping students to succeed on the reformed tests. | APPROPRIATE? | CLEAR? |
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>
10. I rarely change my teaching methods just for just helping my students to succeed on the reformed tests. | APPROPRIATE? | CLEAR?  |
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>YES</td>
<td>NO</td>
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</tbody>
</table>

11. I would neglect some aspects of teaching methods that I think inefficient for preparing my students for the reformed tests. | YES | NO | YES | NO |

12. The reformed tests have little impact on how I teach. | YES | NO | YES | NO |

**Materials**

13. Most of time I use the materials specified by the Ministry of Education in my teaching because they cover most of the content to be tested in the reformed tests. | YES | NO | YES | NO |

14. I would include some materials other than the textbooks in my instruction as long as these materials help my students succeed in the reformed tests. | YES | NO | YES | NO |
15. I would give students worksheets that review expected test content in order to help my students prepare for the reformed tests.  

<table>
<thead>
<tr>
<th>APPROPRIATE?</th>
<th>CLEAR?</th>
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</thead>
<tbody>
<tr>
<td>YES</td>
<td>NO</td>
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</tbody>
</table>

16. I would have my students practice the most updated mock tests developed by the Ministry of Education in order to help my students familiarize the reformed test format.  

<table>
<thead>
<tr>
<th>APPROPRIATE?</th>
<th>CLEAR?</th>
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</thead>
<tbody>
<tr>
<td>YES</td>
<td>NO</td>
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</table>

17. The reformed tests have an influence on my decision regarding what supplementary materials to use in my instruction.  

<table>
<thead>
<tr>
<th>APPROPRIATE?</th>
<th>CLEAR?</th>
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<tbody>
<tr>
<td>YES</td>
<td>NO</td>
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</tbody>
</table>

Syllabus

18. In devising my teaching syllabus for instruction I would look at relevant sources to assure that I cover the subject matter of the reformed test objectives.  

<table>
<thead>
<tr>
<th>APPROPRIATE?</th>
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<tbody>
<tr>
<td>YES</td>
<td>NO</td>
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</table>

19. The reformed tests affect the processes of my syllabus design, including practicing the kind of items that are to be tested.  

<table>
<thead>
<tr>
<th>APPROPRIATE?</th>
<th>CLEAR?</th>
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<tbody>
<tr>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>
20. I give little attention to the reformed tests while constructing my teaching syllabus.

APPROPRIATE?  CLEAR?

YES  NO  YES  NO

21. The reformed tests have an influence on my decision regarding what language skill is more important to be taught.

APPROPRIATE?  CLEAR?

YES  NO  YES  NO

22. I have switched my syllabus design from a grammar-translation syllabus to a structural/functional syllabus as suggested in the Teachers' Manuals.

APPROPRIATE?  CLEAR?

YES  NO  YES  NO

23. I put more attention on the skills which are more likely to be tested in the reformed tests while planning for my curriculum.

APPROPRIATE?  CLEAR?

YES  NO  YES  NO

24. I adjust the sequence of my teaching objectives based on the reformed tests.

APPROPRIATE?  CLEAR?

YES  NO  YES  NO
<table>
<thead>
<tr>
<th>Contents</th>
<th>APPROPRIATE?</th>
<th>CLEAR?</th>
</tr>
</thead>
<tbody>
<tr>
<td>25. I think it is important to cover every section of the textbook although some sections are unlikely to be tested in the reformed tests.</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td></td>
<td>YES</td>
<td>NO</td>
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<tr>
<td></td>
<td>YES</td>
<td>NO</td>
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<tr>
<td>26. I focus more on certain section in the textbook because I think the content is more likely to be tested in the reformed test.</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td></td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td></td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>27. I skip over certain section in the textbook because I think the content in the section is less likely to be tested in the reformed tests.</td>
<td>YES</td>
<td>NO</td>
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<tr>
<td></td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td></td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>28. I would include some relative content in my instruction other than the content in the textbook in order to help my students get a higher score in the reformed tests.</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td></td>
<td>YES</td>
<td>NO</td>
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<td></td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>29. The status of my course is established by the importance of the teaching content reflected on the real life communication instead of on the reformed tests.</td>
<td>YES</td>
<td>NO</td>
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<tr>
<td></td>
<td>YES</td>
<td>NO</td>
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<td></td>
<td>YES</td>
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</table>

162
30. The reformed tests have little impact on what I teach.  

<table>
<thead>
<tr>
<th>APPROPRIATE?</th>
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</thead>
<tbody>
<tr>
<td>YES</td>
<td>NO</td>
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</table>

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**Assessment**

31. I would mark my students' work by using the criteria suggested in the Teachers' Manuals, which are also the criteria used by examiners when marking the reformed tests.

<table>
<thead>
<tr>
<th>APPROPRIATE?</th>
<th>CLEAR?</th>
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<tbody>
<tr>
<td>YES</td>
<td>NO</td>
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</table>

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32. I include different means to evaluate my students, such as writing tests, listening tests, and oral tests.

<table>
<thead>
<tr>
<th>APPROPRIATE?</th>
<th>CLEAR?</th>
</tr>
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<tbody>
<tr>
<td>YES</td>
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</table>

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33. I evaluate my students mostly based upon their written work, such as tests, homework, and worksheets.

<table>
<thead>
<tr>
<th>APPROPRIATE?</th>
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<tbody>
<tr>
<td>YES</td>
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34. I include certain portion of listening and speaking tests in my classroom quizzes in order to promote students' daily life communication.

<table>
<thead>
<tr>
<th>APPROPRIATE?</th>
<th>CLEAR?</th>
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<tbody>
<tr>
<td>YES</td>
<td>NO</td>
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</tbody>
</table>
35. I adapt question items from the mock tests developed by the Ministry of Education in my classroom quizzes in order to prepare my students for the reformed tests.

36. My assessment rating scales have been changed because the rationale for the reformed tests has a different emphasis on students' language skills; for example, I have changed to include students' listening abilities into my final evaluation.
Part II. Factors Associated with Teachers' Perceptions of Impact of the BCT on Their Curricular Planning and Instruction.

Learning attitude

37. Students' learning attitude has certain influence on my curricular and instructional plan.    YES  NO  YES  NO

38. I would teach whatever I think is important to teach no matter whether my students like it or not.  YES  NO  YES  NO

39. I spend less time on oral activities because my students are less interested in the skill which is unlikely to be tested in the reformed tests.  YES  NO  YES  NO

40. I still spend certain time on oral activities although my students are passive in practicing the skill.  YES  NO  YES  NO

41. I often try to cover what will be tested, as my students would expect me to do so.  YES  NO  YES  NO
42. I expect my students to perform well in the reformed tests.

43. I often feel embarrassed if my students perform less well in the reformed tests than other students taught by my colleagues.

44. I often feel guilty if my students do not succeed on the reformed tests.

45. Students' test results influence how people judge me as a good teacher.

46. The reform tests give me important feedback to how I teach.
<table>
<thead>
<tr>
<th>Attention/pressure from external forces</th>
<th>APPROPRIATE?</th>
<th>CLEAR?</th>
</tr>
</thead>
<tbody>
<tr>
<td>47. I have pressure to improve my students' test scores because most of my school administrators are more interested in increasing test scores than in improving overall student learning.</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>48. I feel pressure from my school principle to improve my students' test scores.</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>49. I feel pressure from other teachers to improve my students' test scores.</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>50. I feel pressure from student' parents to improve their test scores.</td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>

| Awareness of the reformed tests | | |
|---------------------------------|---------------|
| 51. I am aware of the changes of the reformed tests. | YES     | NO     | YES   | NO  |
52. I do exam coaching, especially when I am aware of the major content to be tested in the reformed tests.  

<table>
<thead>
<tr>
<th>APPROPRIATE?</th>
<th>CLEAR?</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>

53. I have chances gaining information about the reformed test objectives, such as from in-service teacher education (training) programs or workshops.  

<table>
<thead>
<tr>
<th>APPROPRIATE?</th>
<th>CLEAR?</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>

54. I make little change on my instruction because I am not aware of the new policy of the educational reform, particularly the reformed tests.  

<table>
<thead>
<tr>
<th>APPROPRIATE?</th>
<th>CLEAR?</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>NO</td>
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</tbody>
</table>

---

**Status of the reformed tests**

55. I regard the reformed tests as a high-stakes test, which has a certain influence on students' future career.  

<table>
<thead>
<tr>
<th>APPROPRIATE?</th>
<th>CLEAR?</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>

56. The reformed tests stimulate significant sanctions.  

<table>
<thead>
<tr>
<th>APPROPRIATE?</th>
<th>CLEAR?</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>

57. I think the reformed tests are fair.  

<table>
<thead>
<tr>
<th>APPROPRIATE?</th>
<th>CLEAR?</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>APPROPRIATE?</td>
<td>CLEAR?</td>
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<tr>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>

58. I think the reformed tests are able to test my students' language ability.  

59. I believe the result of the reformed tests has a great influence on my students regarding gaining an admission to the secondary schools.  

60. The reformed tests provide little information about how my students have learned.  

61. The reformed tests have impact on the nation-wide curriculum innovation.  

62. The reformed tests have power to change my school's education policy.
### Part III: Teachers' Personal Characteristics and School/Context Characteristics

63. Location of the school where you are currently teaching: 1) rural  2) suburban  3) urban

<table>
<thead>
<tr>
<th>Are the choices listed appropriate?</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the question clear?</td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>

Suggestions for improvement

64. School type: 1) public  2) private

<table>
<thead>
<tr>
<th>Are the choices listed appropriate?</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the question clear?</td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>

Suggestions for improvement

65. Your gender: 1) male  2) female

<table>
<thead>
<tr>
<th>Are the choices listed appropriate?</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the question clear?</td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>

Suggestions for improvement

66. Grade(s) you are currently teaching (Mark all that apply): 1) grade one  2) grade two  3) grade three

<table>
<thead>
<tr>
<th>Are the choices listed appropriate?</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the question clear?</td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>

Suggestions for improvement

67. Highest degree you have obtained: 1) BA  2) currently working on MA  3) MA  4) Other: ______

<table>
<thead>
<tr>
<th>Are the choices listed appropriate?</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the question clear?</td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>

Suggestions for improvement

68. Years you have been teaching English (including this year): _______ years

<table>
<thead>
<tr>
<th>Are the choices listed appropriate?</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the question clear?</td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>

Suggestions for improvement
69. In average, the number of students in your class: _______

<table>
<thead>
<tr>
<th>Are the choices listed appropriate?</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the question clear?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Suggestions for improvement</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

70. How many times did you attend in-service teacher education (training) program within the past five years, including this year? ______ time(s)

<table>
<thead>
<tr>
<th>Are the choices listed appropriate?</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the question clear?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Suggestions for improvement</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Focus Group Interview Question Item Content Validation Form

Directions: On the following pages are listed 5 open-ended questions intended to obtain field information regarding junior high school English teachers’ perceptions of the impact of the Basic Competence Test on their curricular planning and instruction in Taiwan in order to triangulate the findings from the survey technique. Please rate each item based on two criteria: 1) the appropriateness of the question in representing the dissertation topic "Washback of Public Examinations: Impact of the Basic Competence Test on English teaching in Taiwan's Junior High School" and 2) the clarity of the meaning of the question. Please circle your response.

1) Is the question appropriate?
   YES = Appropriate
   NO = Not Appropriate

2) Is the question clear?
   YES = Meaning Clear
   NO = Meaning Unclear

If the question is appropriate but unclear, please reword the question on the blank lines below the item. If the question is not appropriate and not clear, please indicate the item should be deleted from the questionnaire by writing the word "Delete" on the blank lines.

1. To what extent do you perceive the impact of the Basic Competence Test on your curricular planning, such as your syllabus design, choice of teaching materials other than the textbooks, and the way you would assess your students?

<table>
<thead>
<tr>
<th>Is the question appropriate?</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the question clear?</td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>

Suggestions for improvement

________________________________________________________________________________________

________________________________________________________________________________________
2. How do you perceive the Basic Competence Test impacts your instruction, particularly your teaching method, classroom activities, and the content you would teach?

<table>
<thead>
<tr>
<th>Is the question appropriate?</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the question clear?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Suggestions for improvement</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Do you perceive any other associated factor (e.g., students’ learning attitudes, your professional dignity, pressure from external forces, the level of your awareness of the Basic Competence Test, and the status of Basic Competence Test) that may also influence your perceptions of curricular planning and instruction, and how?

<table>
<thead>
<tr>
<th>Is the question appropriate?</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the question clear?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Suggestions for improvement</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. To what extent do you perceive your personal characteristic, particularly your gender, teaching experience, and educational background, impacts your perceptions of curricular planning and instruction?

<table>
<thead>
<tr>
<th>Is the question appropriate?</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the question clear?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Suggestions for improvement</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. How do you perceive your teaching context, particularly the location of your school, your school type (private or public), the grade(s) that you are teaching, and size of the class, impacts your perceptions of curricular planning and instruction?

<table>
<thead>
<tr>
<th>Is the question appropriate?</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the question clear?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Suggestions for improvement</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX D

Survey Instrument
Dear Teacher,

The purpose of this research is to collect information concerning your perceptions of the impact of the Basic Competence Test (BCT) on your curricular planning and instruction. Ultimately, this research will help the involved educational parties of English education in Taiwan, particularly the examination policy makers, to improve the portion of English test in the future. So, your contribution is very important.

This questionnaire consists of three parts. Part I contains statements about your perceptions regarding the impact of the BCT on your curricular planning and instruction. Part II contains statements about factors possibly associated with your perceptions of the impact of the BCT on your instruction. Part III is related to your personal and your school/context characteristics.

The usefulness of this questionnaire depends entirely on your honesty, candor, and care with which you respond to each of the questions. All information you provide is anonymous and confidential. The code number is used only for data analysis.

Finally, I would like to offer my sincere thanks to your participation and contribution to this study. Please return the questionnaire to my Taiwan's research assistant by May 18, 2001. If you have any concern about this study, please do not hesitate to contact my Taiwan's research assistant or me.

Sincerely,
Lih-Mei Chen
Doctoral Candidate
Dept. of Second and Foreign Language Education
The Ohio State University
Instructor, Dept. of Applied Foreign Languages
The Chungchou College of Technology and Commerce
Chen.358@osu.edu

Research assistant in Taiwan: Kuei-Mei Chen
15 Lane 680 Section 3 Changyuan Rd. Changhua, Taiwan, ROC.
TEL: (04) 7239067  7250167
Part I: Impact of the Basic Competence Test on Teachers' Curricular Planning and Instruction.

Directions: In this questionnaire, the term "BCT" refers to the Basic Competence Test. Please read each of the following statements and write down the number that best describes your perceptions regarding the level of agreement on your activity/time arrangement, your teaching method, the materials you are using to teach, your syllabus design, the depth of content you cover, and your classroom assessment. Please place your response in the blank right after the item number.

KEY

6 = Strongly Agree  
5 = Agree  
4 = Slightly Agree  
3 = Slightly Disagree  
2 = Disagree  
1 = Strongly Disagree

For example,  
5  I like to watch TV. If you place 5 on this statement, it means you agree that you like to watch TV.

1. ____ The BCT motivate me to implement activities to promote my students’ test-taking skills.  
2. ____ My time allotment in class would be different if the BCT were cancelled.  
3. ____ I arrange my classroom activities to meet the requirements for the BCT.  
4. ____ I spend more time instructing grammar other than communication skills because I think grammar is more likely to be tested on the BCT.  
5. ____ I rarely use specific teaching activities to promote my students’ language skills just for the BCT.  
6. ____ I teach test-taking strategies, especially as the BCT testing date gets closer.  
7. ____ I arrange my classroom activities based upon different factors but not just based upon the objectives of the BCT.  
8. ____ I change my teaching methods to help students to succeed on the BCT.  
9. ____ I would select teaching methods to help develop my students’ skills that are more likely to be tested on the BCT.  
10. ____ I neglect some teaching methods that are not able to prepare my students for the BCT.  
11. ____ The BCT has little impact on how I teach.  
12. ____ I rarely change my teaching methods to help my students succeed on the BCT.  
13. ____ I usually use the materials specified by the Ministry of Education because they cover the topics on the BCT.  
14. ____ I use materials not the textbooks if they will help my students succeed on the
15. ____ I give students worksheets to review content expected to be on the BCT.
16. ____ I have my students do the Ministry of Education mock tests to familiarize students with the BCT.
17. ____ The BCT influences which supplementary materials I use.
18. ____ I look for relevant materials for syllabus to cover the subject matter on the BCT objectives.
19. ____ The BCT affects my syllabus, including practicing the kind of items that are to be tested.
20. ____ I pay little attention to the BCT while constructing my teaching syllabus.
21. ____ The BCT influences my decision about which language skill is more important to be taught.
22. ____ I have changed my syllabus focus from grammar to communication.
23. ____ I emphasize the skills which are more likely to be tested on the BCT while planning for my syllabus.
24. ____ I use Teachers’ Manuals as a guideline for my curricular planning and instruction.
25. ____ I skip over certain sections in the textbook because they are less likely to be tested on the BCT.
26. ____ I adjust the sequence of my teaching objectives based on the BCT.
27. ____ I focus on certain sections in the textbook because they are more likely to be tested on the BCT.
28. ____ I include some relevant content to help my students perform well on the BCT.
29. ____ My course content is established to reflect the objectives of the BCT.
30. ____ The BCT has little impact on what I teach.
31. ____ I cover every section in the textbook although some sections are unlikely to be tested on the BCT.
32. ____ I include different technique to evaluate my students.
33. ____ I evaluate my students’ works by using the criteria used by examiners when marking the BCT.
34. ____ I adapt test items from the Ministry of Education mock tests in my classroom quizzes.
35. ____ I evaluate my students mostly based upon their written works.
36. ____ I include listening tests in my classroom quizzes.
37. ____ I include speaking tests in my classroom quizzes.
38. ____ My assessment has been changed for the BCT.
Part II. Factors Associated with Teachers' Perceptions of the Basic Competence Test on Curricular Planning and Instruction

Directions: Please read each statement below and write down the number that most describes your current teaching situation regarding the level of agreement on the factors associated with your perceptions of impact of the BCT on your curricular planning and instruction. Please place your response in the blank right after the item number.

KEY

6 = Strongly Agree
5 = Agree
4 = Slightly Agree
3 = Slightly Disagree
2 = Disagree
1 = Strongly Disagree

39. ____ I would teach whatever I think is important to teach no matter whether my students like it or not.
40. ____ I spend less time on certain sections of the textbooks because my students are less interested in them.
41. ____ I often teach what will be tested because my students expect me to do so.
42. ____ I expect my students to perform well on the BCT.
43. ____ Students' learning attitudes influence my teaching.
44. ____ I will feel embarrassed if my students perform less well on the BCT than other students taught by my colleagues.
45. ____ I will feel guilty if my students do not succeed on the BCT.
46. ____ Students' test results influence how people judge me as a good teacher.
47. ____ The BCT gives me important feedback about how I teach.
48. ____ Improving students' test scores is stressful to me because my school administrators often compare my students’ test score results with others.
49. ____ I feel pressure from my school principal to improve my students' test scores.
50. ____ I feel pressure from other teachers to improve my students' test scores.
51. ____ I feel pressure from students' parents to improve my students’ test scores.
52. ____ I am aware of the changes of the BCT.
53. ____ I teach in the test especially when I am aware of the test format on the BCT.
54. ____ I have opportunities gaining information about the BCT objectives.
55. ____ I make little change in my instruction because I am not aware of the new policy of the BCT.
56. ____ I regard the BCT as a test, which will influence students' future career.
57. ____ Students' BCT score result will have significant sanctions to most teachers.
58. ____ The BCT is a fair test to students.
59. ____ The BCT is able to test my students' language ability.
60. ____ Students’ BCT score result will have significant rewards to most teachers.
61. ____ The BCT will influence students’ admission to the secondary schools.
62. ____ The BCT provides little feedback about students’ learning.
63. ____ The BCT impacts nationwide curriculum innovation.
64. ____ The BCT has changed my school's language teaching policy.
65. ____ My curricular planning and instruction are influenced by teaching time.
66. ____ My school's policy influences my curricular planning and instruction.
67. ____ My personality influences my curricular planning and instruction.
Part III: Teachers' Personal Characteristics and School/Context Characteristics

Directions: Please write down the number for the most appropriate response that describes your current teaching profile.

68. _____ Location of the school where you are currently teaching:
   1) rural  2) urban
69. _____ Your school type:
   1) public  2) private
70. _____ Your gender:
   1) male  2) female
71. _____ Are you currently teaching Grade 3 in junior high school?
   1) Yes  2) No
72. _____ Highest degree you have obtained:
   1) Bachelor degree  2) Master degree  3) other: __________
73. _____ Years you have been teaching English in junior high school (including this year):
   1) 5 or under 5  2) 6-10  3) 11-15  4) over 16
74. _____ On the average, the number of students you have in your class in junior high school:
   1) under 30  2) 31-39  3) 40-49  4) over 50
75. _____ How many times did you attend any kind of in-service teacher education (training) program within the past five years, including this year?
   1) under 2  2) 3-5  3) 6-9  4) over 10

~ Thank you very much for your participation and contribution! ~
APPENDIX E

Discussion Guide for Focus Group Interviews
Focus Group Discussion Guide

I. Introduction: Welcome and introduce names. Have the participated teachers share about how they usually plan their curricula.

II. Have the participated teachers complete the "Participation Information Form" with observed background information.

III. Teachers’ perceptions about the Basic Competence Test
   1. What influences your curricular planning and instruction?
   2. To what extent do you perceive the impact of the Basic Competence Test on your curricular planning?
      Probing questions: such as 1) your syllabus design, 2) choice of teaching materials other than textbooks, 3) classroom activities, 4) your teaching method, 5) the content you would teach, and 6) the way you would assess your students.
   3. Do you perceive any other associated factor that may influence your perceptions of curricular planning and instruction, and how?
      Probing questions: particularly 1) students’ learning attitudes, 2) your professional dignity, 3) pressure from external forces, 4) the level of your awareness of the Basic Competence Test, and 5) the status of the Basic Competence Test.
   4. To what extent do you perceive your personal characteristic impacts your perceptions of curricular planning and instruction?
      Probing questions: e.g., 1) your gender, 2) teaching experience, and 3) educational background.
   5. How do you perceive your teaching context impacts your perceptions of curricular planning and instruction?
      Probing questions: particularly 1) the location of your school, 2) your school type (private or public), 3) the grade(s) that you are teaching, 4) stress from your school administrators, and 5) size of the class.

IV. Summary and conclusion
   1. Is there any other idea/point that you would like to share with us?
   2. Any other thing that you would like to comment?

V. Appreciations
APPENDIX F

Focus Group Interview Reformed Consent Form
Informed Consent Form
The Ohio State University

Title of Project:

Washback of Public Examinations: Impact of the Basic Competence Test on Taiwan Junior High School English Teaching

Description:

1. The study in which you will be participating is intended to investigate junior high school teachers’ perceptions of the impact of the Basic Competence Test on English curricular planning and instruction.
2. If you agree to participate in this study, you will be asked to attend discussion of several questions regarding the topic in a focus group interview. The questions are related to:
   1) To what extent do you perceive the impact of Basic Competence Test on your curricular planning, such as your syllabus design, choice of teaching materials other than the textbooks, your teaching method, the content you would teach, classroom activities, and the way you would assess your students?
   2) Do you perceive any other associated factor (e.g., students' learning attitudes, your professional dignity, pressure from external forces, the level of your awareness of the Basic Competence Test, and the status of the Basic Competence Test) that may also influence your perceptions of curricular planning and instruction, and how?
   3) To what extent do you perceive your personal characteristic, particularly your gender, teaching experience, and educational background, impacts your perceptions of curricular planning and instruction?
   4) How do you perceive your teaching context, particularly the location of your school, your school type (private or public), the grade(s) that you are teaching, and size of the class, impacts your perceptions of curricular planning and instruction?
3. This interview will be lasted around 1.5 hours. It will be tape recorded in order to help the researcher interpret the data later.
Consent Form:

I have read this consent form, and understand the content of this form. I understand my participation in this research is confidential. Only the person in charge will have access to my identity and to information that can be associated with my identity. I also understand that my participation is voluntary and I can stop participation in the research at any time without penalty of any kind.

I hereby agree to participate in this study.

<table>
<thead>
<tr>
<th>Participant’s Signature</th>
<th>Date</th>
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</table>

<table>
<thead>
<tr>
<th>Researcher’s Signature</th>
<th>Date</th>
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<tr>
<td></td>
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</tr>
</tbody>
</table>

If you have any question or concern, please contact the following persons:

Researcher: Lih-Mei Chen  
Doctoral Candidate  
Second/Foreign Language Education (TESOL)  
The Ohio State University  
Instructor, Department of Applied Foreign Languages  
The Chungchou College of Technology and Commerce  
(04) 723-9067 (Taiwan)  
chen.358@osu.edu

Advisor: Professor Dr. Keiko Samimy  
Dept. of TESOL  
The Ohio State University  
(614) 292-7597 (U.S.A)  
samimy.2@osu.edu
APPENDIX G

Instructions on Note-Based Content Analysis
Instructions on Note-Based Content Analysis

I. Before the interview starts
   Test the tape recorder to make sure it is working appropriately.

II. During the interview
   1. Listen for inconsistent comments and probe for understanding.
   2. Listen for vague or cryptic comments and probe for understanding.
   3. Offer a summary of key questions and seek confirmation.
   4. Draw a diagram of the seating arrangement.
   5. Complete the "Participation Information Form" with observed background information on participants.

III. Immediately after the interview
   1. Spot-check tape recording to ensure proper operation.
   2. Conduct debriefing between moderator and assistant moderator.
      - Identify the most noteworthy quotes.
      - Identify the important themes or ideas expressed.
      - "big ideas."
      - Compare and contrast this focus group with other groups or with what was expected.
   3. Label and file all field notes, tapes, and other materials.

IV. Within a week after the interview
   1. Gather tapes and field notes by category.
   2. Review field notes by category.
   3. Go to end of the tape and translate the oral summary.
   4. Go the beginning of the tape and listen to the entire tape. Capture word-for-word the exact statements of the notable quotes.
   5. Listen to debriefing.
   6. Identify the major points. The major points will usually relate to the important questions that were summarized in the oral debriefing. The major points might include "big ideas" or "moderator insights" that are supported by the data (the comments of the participants).
   7. Write the first draft, which will include:
      - Major points
      - Notable quotes
   8. Share the first draft with the assistant for feedback and comments.
   9. Discuss feedback from assistant moderator and revise report so that it is mutually acceptable to both moderator and assistant moderator.