

University of Montana

ScholarWorks at University of Montana

Graduate Student Theses, Dissertations, &
Professional Papers

Graduate School

1999

An investigation of Taiwanese middle school teachers' attitudes toward Taiwanese middle school education

Zhizheng Zhou
The University of Montana

Follow this and additional works at: <https://scholarworks.umt.edu/etd>

Let us know how access to this document benefits you.

Recommended Citation

Zhou, Zhizheng, "An investigation of Taiwanese middle school teachers' attitudes toward Taiwanese middle school education" (1999). *Graduate Student Theses, Dissertations, & Professional Papers*. 10557. <https://scholarworks.umt.edu/etd/10557>

This Dissertation is brought to you for free and open access by the Graduate School at ScholarWorks at University of Montana. It has been accepted for inclusion in Graduate Student Theses, Dissertations, & Professional Papers by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact scholarworks@mso.umt.edu.

INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

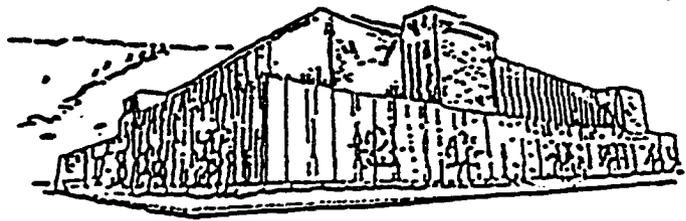
In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

UMI[®]

Bell & Howell Information and Learning
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
800-521-0600



Maureen and Mike
MANSFIELD LIBRARY

The University of **MONTANA**

Permission is granted by the author to reproduce this material in its entirety,
provided that this material is used for scholarly purposes and is properly cited in
published works and reports.

*** Please check "Yes" or "No" and provide signature ***

Yes, I grant permission

No, I do not grant permission

Author's Signature

Chou

Date

1/5/99

Any copying for commercial purposes or financial gain may be undertaken only with
the author's explicit consent.

AN INVESTIGATION OF TAIWANESE MIDDLE SCHOOL
TEACHERS' ATTITUDES TOWARD TAIWANESE
MIDDLE SCHOOL EDUCATION

by

Chou Chih-Cheng

BA, National Taiwan Normal University, 1975

MA, Fu Jen Catholic University, 1979

presented in partial fulfillment of the requirements

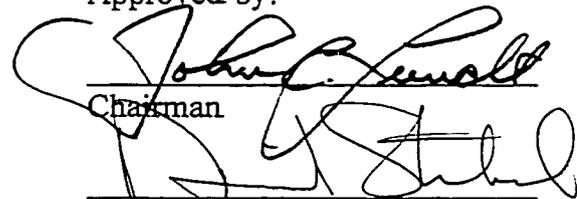
for the degree of

Doctor of Education

The University of Montana

1998

Approved by:



Chairman



Dean, Graduate School

March 11, 1999

Date

UMI Number: 9935329

UMI Microform 9935329
Copyright 1999, by UMI Company. All rights reserved.

**This microform edition is protected against unauthorized
copying under Title 17, United States Code.**

UMI
300 North Zeeb Road
Ann Arbor, MI 48103

An Investigation of Taiwanese Middle School Teachers' Attitudes Toward Taiwanese Middle School Education (128 pp.)

Director: Dr. John C. Lundt



Over the past few years, social critics and educators have voiced their concern about Taiwanese middle school education, which has been found to abound in a plethora of problems. Notable among them are students' academic overload, developmental fitness and behavioral deviation, teachers' competencies and professional development, and administrators' leadership styles. All of these problems, individually and jointly, have exerted negative influence on Taiwanese middle school education.

The present research indicates that the interviewed teachers not only confirm the problems identified by the social critics and educators, but also prioritize them. Together, the 20 interviewees mentioned 111 problems needing change. These problems are categorized into areas, of which curriculum is the area having the largest number of problems, followed by teacher qualification/training, administration, parent and community, and student characteristics. The other five areas needing change are examination, class size, grouping, urban-rural gap and society.

Concerning whether the model American middle school concept may be implemented in Taiwan, the majority of the interviewees provide reserved responses. Despite the fact that the child-centered and team-based model is highly valued by the interviewees, they see no likelihood of implementing it, at least in the near future. They suggest that it will not likely be implemented unless there is change in entrance examinations, teachers' mind-sets and training, parents' perspectives about education, school buildings and facilities, social concepts and values.

The futuristic-oriented curriculum is also regarded to be the most appropriate middle school curriculum by the interviewees. This curriculum not only prepares the students for the 21st century but, also accommodates students in a diversified society. However, the interviewees see little likelihood that it may be implemented in the near future. The resistant factors, according to them, are similar to those impeding the implementation of the model middle school concept.

Acknowledgments

The present study would not have been possible had it not been for the following key people. First, my enduring heart-felt gratitude should go to my advisor Dr. John C. Lundt, for his encouragement, advice and inspiration. The quintessence of the present study has been greatly influenced by his works. Second, I would also like to express my sincere thanks to Dr. Donald Robson, Dean of the School of Education, for his valuable advice.

I also owe unlimited gratitude to Dr. Roberta Evans, Dr. William Fisher and Dr. Len Foster, whose class instructions have been of tremendous value to me. In fact, the present study is the brainchild of all the faculty members of the Department of Educational Leadership. Thanks are also due to Dr. Beverly Chin for her comments on style. Also, I would like to thank Jodi Moreau, the Assistant Administrator, for her constant help.

Finally, my wife Susan and my boy Jelon deserve my utmost love for tolerating my absent-mindedness during my four-year study.

TABLE OF CONTENTS

	Page
I. Chapter 1: Introduction	1
A. Purpose of the Study	4
B. Research Questions	5
C. Significance of the Study	6
D. Definitions of Terms	7
E. Limitations of the Study	8
F. Organization	9
II. Chapter 2: Review of Related Literature	10
A. History of the American Middle School Movement	10
1. The Emergence of Junior High School	10
2. The Emergence of Middle School	15
3. The Format of Middle School	19
B. The Movement of the Taiwanese Middle School Education	25
1. Taiwanese Secondary Education during the Japanese Occupation (1895-1945 A.D.)	25
2. A Brief History of the Chinese Secondary Education Movement	27
3. The Creation of Middle School (1968-Present)	29
C. Factors Influencing Education	31
1. Philosophical Factors	32

2.	Historical Factors	32
3.	Social Factors	32
4..	Cultural Factors	33
D.	Factors Influencing Taiwanese Educational Philosophy	34
1.	Historical Factors	35
2.	Cultural and Social Factors	36
E.	Taiwanese Middle School: Students' Preparation for High School	37
1.	General Criticisms	40
2.	Life in a Pressure Cooker: Academic Overload	41
3.	Developmental Tasks	43
4.	Student Development Problems	45
5.	Juvenile Delinquency	46
6.	Campus Violence	47
7.	Dropouts	48
8.	Gender Problems	48
9.	Rationale for Deviant Behaviors	49
F.	Middle School Teachers	50
1.	Attributes	51
2.	Competencies	51
3.	Characteristics	51
4.	Teachers' Instructional Problems	52
5.	Teachers' Roles in the Total Institution	55

G.	American Middle School: Preparation for the Future	57
H.	Conclusion	60
III.	Chapter 3: Methodology	62
A.	Population and Sampling	62
B.	Instrumentation	63
C.	Data Collection	64
D.	Data Analysis	65
IV.	Chapter 4: Findings	70
A.	Demographics	71
1.	Years of Teaching	71
2.	Geographic Regions	71
3.	Gender	72
4.	Subjects	72
B.	Interview Procedures	73
C.	Research Question Findings	74
1.	The Research Questions	74
2.	Summary	93
V.	Chapter 5: Conclusions, Discussion, and Recommendations	95
A.	Conclusions	95
B.	Discussion	96
C.	Recommendations for Action	98
D.	Recommendations for Further Study	99

VI.	Appendices	101
A.	Ethnographic Interview Protocol	101
1.	Research Questions	102
2.	Attached Paper 1	103
3.	Attached Paper 2	105
B.	Pilot Cover Letter and Critique Sheet	106
1.	Pilot Cover Letter	107
2.	Critique Sheet: Pilot Interview	109
C.	A Map of Taiwan's Counties	111
VII.	References	112

LIST OF TABLES

	Page
Table 1: A Flow Chart of Taiwanese Education	38
Table 2: Student Population Composite	39
Table 3: Juvenile Delinquency Rate	46
Table 4: Years of Teaching	71
Table 5: Geographic Regions of the Teachers	72
Table 6: Gender	72
Table 7: Subjects	73
Table 8: Degrees of Identification	76
Table 9: Areas of Needed Change	77

CHAPTER 1

INTRODUCTION

Educational philosophies and practices inevitably reflect cultural mindsets, social values, and beliefs on the one hand, and politico-economic strategies on the other hand (Ozman & Craver, 1992; Pulliam & Patten, 1995). They are adopted, adjusted, and abandoned so that new ones may substitute for them. Prior to the 20th century, when societies remained rather closed and slow-changing, educational philosophies and practices tended to remain unchanged over centuries, with only minute modification. The history of Chinese education is an excellent example. For almost two millennia, all intellectuals were required to learn similar subjects and take the national examination, which selected talented youth to occupy governmental positions (Hu, 1990).

However, the pace of change that had been for centuries almost imperceptible began accelerating at an exponential rate in the 20th century (Lundt, 1996). Future shock, third wave, post-information age, global logistics, Internet, distance learning—all tell of the unbelievable progress of science and technology. Cultural lag, intragenerational disjunction, experience compression, pre-figurative society, technophobia, functional illiteracy—all highlight the psychological shocks we are experiencing (Longstreet & Shane, 1993; Coates & Jarratt, 1989).

In this era of turbulent knowledge explosion, educators have recognized the need to meet these diverse challenges. Indeed, over the past few decades, industrialized nations have undergone educational reforms to meet individual socio-political needs. They regard socio-political change of education as the most efficient. For instance, America started its

major curriculum reform of the 20th century in the 1960s, right after the U.S.S.R.'s launching of Sputnik. Later reforms promulgated by the Bush and Clinton administrations called for "a search for excellence" (Pulliam & Patten, 1995).

Parallel to American educational reforms were the Japanese reforms starting in 1952; French reforms in 1968; Korean reforms in 1985 and German reforms in the 1960s. Obviously, all these reforms echoed the accelerating progress of sci-tech on the one hand, and socio-economic-political needs on the other (Journal of Educational Reform, 1996).

Educational reform may be regarded as a planned change. According to Cuba (1967), three types of change may be identified: evolutionary (natural change), homeostatic (reactive change), and neomobilistic (planned change). Bennis (1966) listed eight types of change, including planned change, indoctrination, coercive change, technocratic change, international change, socialization change, emulative change, and natural change. In "The Planning of Change," Chin (1969) offered a more generalized concept of change: rational-empirical, normative-reeducative, and power-coercive.

The rational-empirical change is based on the belief that people will follow their rational self-interests once they are revealed to them. The normative change recognizes change as a socio-cultural phenomenon which is reinforced by group values and attitudes. The power-coercive strategy is rooted in the implementation of influence through position or some other source.

As a planned or power-coercive change, educational reforms need to develop six ingredients: Vision, Planning, Problem Coping, Empowerment, Staff Development, and Culture Restructuring (Fullan & Stiegelbauer, 1991).

Further, since every reform aims at converting the present condition of an old system to a desired condition of a new system, tension might arise accordingly. The tension, according to Senge (1990), can be resolved in two ways: either by raising current reality toward the vision or lowering the vision toward current reality. To raise current reality to vision, there needs to be creative tension. That is to say, we have to expel negative tension resulting from cultural lag, intragenerational disjunction, experience compression, and reluctance to change.

Generally, some of those change issues have addressed curriculum; some have concentrated on planning or structure; still others on staff development or on redefining student, teacher, administrative, and parental roles. In a sense, a major tenet has been for schools to reexamine their purposes, relationships, and intended results. In essence, schools at all levels over the last few years have been challenged to totally restructure not only what they do, but also how they do it, and perhaps, most importantly, why they do it (Street, 1994).

It should be borne in mind that educational change or transition can sometimes be far from smooth. There are a number of persistent barriers to change, including a lack of understanding of the change, human nature's tendency to favor the status quo, lack of skills for implementing change, poor leadership, and absence of precise goals for assessing the impact of change. Of course, barriers to change may not be always bad, because they may: (a) protect the organization from random change which may be harmful; (b) protect the system from takeover by vested interest; and (c) insure that unanticipated consequences of a change be spelled out and possibly avoided (Klein, 1967).

One of the factors that exert influence on change is the attitude of those involved. Joyce, Wolf and Calhoun (1993) proposed that the most important changes were attitudinal. According to them, change has been accomplished by educators who relate the change or improvement in terms of what it means to them or how it positively affects their current practice. Fullan and Miles (1992) believed the condition for successful initiative involves a group of educators who have varied roles and are provided opportunity to manage change and innovate together.

Ackoff (1974) found planning is essential to change. According to him, effective reform is actualized when the process is planned and when personal change is initiated. Just as problem solving assists organization, planning increases effectiveness of change for individuals.

Concerning attitudes toward planning or change, Ackoff (1974) categorized individuals into four groups, namely, inactivists, reactivists, preactivists, and interactivists. Inactivists are satisfied with conditions as they are and continuation of the status quo. Reactivists not only resist change, but they prefer a previous state to the present. As far as preactivists are concerned, they believe that the future will be better than the past, and continue to ready for the future. Finally, there are interactivists who design a desirable future and invent ways of bringing the future about (Ackoff, 1974).

Purpose of Study

Through decades of development, the Taiwanese intermediate school education has inevitably accumulated a plethora of problems. Whether the present system, which has been criticized for the problems, needs to be changed is a question open to frequent

debates. If the Taiwanese intermediate school education needs change at all, what new system can be established? Further, if a new system is to be established, to which existing standard model can it refer? Standards are needed where a new system is to be set up.

Standards are educative, specific examples of excellence on tasks and values: The music of Yo Yo Ma and Wynton Marsalis each sets a standard for other musicians; the fiction of Tom Wolfe and Mark Twain each sets a standard for American writers. These standards are educative and enticing; they provide not only models but a set of implicit criteria against which to measure their achievement. (Wiggins, 1991, p. 19)

Eisner (1995) also mentioned that standards are appropriate for some kinds of tasks which are instrumental to larger and more important educational aims.

Based on the change theory described above, American middle school concept and curriculum, and Taiwanese intermediate school problems outlined in Chapter 2, this study centers around two foci. First, it endeavors to investigate intermediate school teachers' attitudes toward the problems with Taiwanese middle level education. Second, it aims at investigating whether the American middle school concept and curriculum can be applied to Taiwanese intermediate level education.

Research Questions

Realizing teachers are closest to students and play a most important role in fulfilling the middle school philosophy (Wiles & Bondi, 1993), we take it for granted that middle school teachers' attitudes toward problems and their proposed solutions could constitute a solid foundation for our educational reform. The following research questions

are thus proposed:

1. Do teachers agree with the critics of Taiwanese education?
2. Do the teachers identify the same problems with the educational system that the critics do?
3. What do the teachers believe need to be changed in Taiwan's educational system?
4. Do teachers believe that the American middle school concept will work in Taiwan?
5. Do teachers believe that the curriculum of the American middle school will meet the needs of Taiwanese students in the future?

Significance of the Study

That Taiwanese educators have not provided our adolescents with appropriate education is an undeniable fact. Over the past few years those who voice their calls for reformation have tended to be social critics, high-ranked educators, and intellectual elites. The Taiwanese Committee of Education Reformation was mainly composed of these groups. Their criticisms and proposals, however, bear significance and contribution.

The present study attempts to reflect the empirical phenomena observed by intermediate school teachers, and enables us to look at Taiwanese middle level education from other perspectives. Based on the interview narration and analysis, the conclusion may provide us with firsthand data. Further, teachers' proposed strategies, which are empirically-oriented, may serve as a guide for policy designs at the national and local levels. The American middle school concept, therefore, may facilitate our understanding of

where we are in the developmental stage. The adoption of the American middle school concept, to a certain degree, may benefit Taiwanese intermediate school education.

Definition of Terms

Attitudes: “dispositions” or “opinions” which are held by individuals (Webster’s New Dictionary, 1986).

Balanced curriculum: incorporates all three areas—essential learning skills, subject content, and personal development (Wiles & Bondi, 1993).

Articulation: process by which educational goals and curricular programs of a school system are coordinated among the various levels from preschool to high school (Wiles & Bondi, 1993).

Compulsory education: school attendance which is required by law on the theory that it is for the benefit of the commonwealth to educate all the people. Today, the practice is under attack by critics (Pulliam & Patten, 1995).

Developmental tasks: social, physical, and maturational tasks regularly encountered by all individuals in our society as they progress from childhood to adolescence (Havighurst, 1952).

Early adolescence: stage of human development generally between ages 10 and 14 when individuals begin to reach puberty (Wiles & Bondi, 1993).

Entrance exam: in Taiwan, the Joint University Entrance Exam and Joint High School Entrance Exam are held each year to pick up qualified students, and are characterized by standardization, norm-reference, and multiple choices.

Grouping: heterogeneous grouping does not divide learners on the basis of ability

or academic achievement; homogeneous grouping divides learners on the basis of specific levels of ability, achievement, or interest—sometimes referred to as tracking (Wiles & Bondi, 1993).

Kechu system: practiced in China from Hsuei and Tang Dynasty to Ch'ing Dynasty for more than 13 centuries (606 AD - 1906 AD), and sponsored by the national government to pick up talented individuals to fill governmental posts (Hsu & Chou, 1997; Hu, 1990).

Label: a descriptive work or phrase applied to a person, group, theory, etc., as a convenient generalized classification (Webster's New Dictionary, 1986).

Middle school: a school in between elementary and high school, housed separately, and ideally, in a building designed for its purpose and covering usually three of the middle school years, beginning with grade seven (Wiles & Bondi, 1993).

Shitaifu concept: the deep-rooted mindset held by Chinese people that well-educated people deserve appreciation and recognition, and usually hold higher positions and social status (Hu, 1990).

Limitations of the Study

This study is limited by the following factors:

1. Due to the scope of this study, grade reporting, extra curricular activities, and counseling are not included for investigation.
2. Due to the focus of this study, principals, community members, parents nor students were interviewed.
3. Inexperienced teachers were not interviewed for fear of their lack of in-

depth understanding and empirical knowledge.

4. Due to teachers' lack of English proficiency, the interviews were conducted in Chinese.
5. As a qualitative study, this work is not uniformly generalizable.

Organization

The introduction, statement of this problem, research questions, definitions of terms, and significance of the study are presented in Chapter 1. Chapter 2 provides the review of related literature. Chapter 3 describes the methodology and procedures that were used to gather and analyze the data for this study. Chapter 4 will present the results of analyses and findings to emerge from the study. Chapter 5 will provide a summary of the study and findings, conclusion, discussion, and recommendations for action and further study.

CHAPTER 2

REVIEW OF RELATED LITERATURE

A History of the American Middle School Movement

The Emergence of Junior High School

Lundt (1996) pointed out that the roots of the middle school concept could be traced back over 100 years to an 1888 speech before the National Education Association, delivered by then Harvard President Charles W. Eliot. Eliot proposed that secondary education absorb the last two years of elementary school for the purpose of better preparing students for college entrance. Basically, Eliot wanted to extend the high school courses downward into elementary education (Pulliam & Patten, 1995). Eliot's main purpose was to assist the colleges rather than the students. However, his actions did have the net effect of drawing attention to an intermediate student population (Lundt, 1996).

In 1895, seven years after Eliot's speech, the National Education Association's Committee of Fifteen on Elementary Education mentioned:

Modern education emphasizes the opinion that the child, not the subject of study, is the guide to the teacher's efforts. To know the child is of paramount importance. (NSSE, 1971, p. 5)

This statement, according to Wiles and Bondi (1993) was evidence that the "second" philosophy of education was firmly in place in 1895. Educators came to realize that instead of seeing education as a process of information transfer and an educated person as a purveyor of unusual information, they should regard schooling as being for the development of the individual learner.

Further attention was focused on this particular age group with the 1905 publication of Adolescence by psychologist G. Stanley Hall. Hall's work helped educators to identify adolescence as a unique stage in human development. The uniqueness of adolescents was described by Hall as follows:

With the advent of puberty, and the beginning of the adolescent period, there is a marked acceleration in the development of the whole psychic life. The mind, which has been expanding throughout childhood, now expands more rapidly. The intellect essays larger fields of conquest in the way of knowledge. The emotional nature becomes endowed with a fever, sensitive to the subtle shades of the beautiful and the sublime. And the will seems to awaken to a new realization of its own power. (Koos, 1927, p. 20)

Unlike Eliot, who wanted to extend the high school courses downward into elementary education, Hall wanted to separate the last two years from the eight-year elementary school system. He felt that reorganization was necessary to meet the needs of older elementary pupils who were no longer children. Others also believed that the eight-year elementary and four-year high school did not provide a smooth transition from childhood to young adult life. Aware of the gap, Hall was mainly motivated by a desire to serve the mental, physical, and emotional needs of a newly recognized group in society (Lundt, 1996).

The Cardinal Principles of Secondary Education developed by the NEA in 1918 also laid a good foundation for child-centered education. In contrast with the college-centered and mental-disciplined-oriented Committee of Ten, these principles stressed

guidance, a wide range of subjects, adaptation of content and methods to the abilities and interest of students, and flexibility of organization and administration (Pulliam & Patten, 1995). In addition to the Seven Cardinal Principles set forth in the 1918 Report of the Commission on the Reorganization of Secondary Education, the case for reorganization and for a separate junior high unit was also summarized well in Lounsbury (1992).

The eight years heretofore given to elementary education have not, as a rule, been effectively utilized. The last two of these years in particular have not been well adapted to the needs of the adolescent.... We believe that much of the difficulty will be removed by a new type of secondary education beginning at about 12 or 13. Furthermore, the period of four years now allotted to the high school is too short a time in which to accomplish the work outlined above.

We, therefore, recommend a reorganization of the school system whereby the first six years shall be devoted to elementary education designed to meet the needs of pupils approximately 6 to 12 years of age; and the second six years to secondary education designed to meet the needs of pupils approximately 12 to 18 years of age.

The six years to be devoted to secondary education may well be divided into two periods, which may be designed as the junior and senior periods. In the junior period, emphasis should be placed upon the attempt to help the pupil explore his own aptitudes and to make at least a provisional choice of the kinds of work to which he shall devote himself. In

the senior period, emphasis should be given to training in the fields thus chosen. This distinction lies at the basis of the organization of the junior and senior high schools.

In the junior high school there would be a gradual introduction of departmental instruction, some choice of subjects under guidance, promotion by subjects, pre-vocational courses, and a social organization that calls forth initiative and develops the sense of personal responsibility for the welfare of the group. (Lounsbury, pp. 12-13)

The recognition and awareness of the developmental uniqueness of adolescents led to the creation of junior high schools. The first of these schools was Indianola Junior High School, Columbus, Ohio (established in 1909), which was soon followed by the Intermediate Industrial School, Cleveland, Ohio (established in 1910) (Wiles & Bondi, 1993; Wu, 1994). Starting from the 1910s, the number of junior high schools has been on the increase. There were approximately 400 in 1920; 6,500 in the 1950s; and by 1967, 7,437 junior high schools (Wiles & Bondi, 1993; Wu, 1994). The popularity of junior high schools resulted in the gradual decline of eight-year elementary schools. Since the middle of this century, the 6-3-3 or 6-6 plan of organization has become more popular than traditional eight-year elementary school followed by a four-year high school. Some critics have experimented with a 6-2-4 or a 4-4-4 organizational plan (Pulliam & Pattern, 1995).

The writings of Eliot, Hall and others led to creation of junior high schools designed to meet the needs of emerging adolescents (Lundt, 1996). There were of course, other socio-economic factors which helped promote the popularity of junior high schools

during this period. Gutek (1992) pointed out the following factors (Gutek, 1992):

1. A large number of Southern and Eastern European immigrants settled in America.
2. America was becoming industrialized and therefore a technological society was emerging.
3. After the Spanish-American War and World War II, America had become a world super power.
4. Behavioral studies and science exerted great impact on education and society.
5. Progressive education and pragmatism had much influence on American education.

Owing to these factors, America needed to reorganize its life and society.

American schools were also forced to reorganize to meet socio-economic changes. The traditional "8-4" organization plan was criticized for being unable to provide skilled workers (Gutek, 1992). Part of the theory behind junior high schools related to a need for vocational or terminal secondary education. Also, the most important reason for the popularity of the three-year junior high school was that it separated youngsters just starting the adolescent period of life from both older and younger students. This contributed to the development of social skills and avoided cramming children of all ages into a matrix of social and intellectual competition (Pulliam & Patten, 1995).

The Emergence of Middle School

Despite decades of efforts, junior high school did not fulfill the functions it was created for. Therefore, in the late '50s and early '60s, there were calls for setting up middle schools in place of junior high schools. As a result, the number of junior high schools decreased from 7,437 in 1967 to 4,298 in 1991, while the number of middle schools reached 8,829 in 1991 (Wu, 1994).

There were, of course, various reasons underlying junior high schools falling into disfavor among educators and society as a whole. Lundt (1996) pointed out:

Despite the establishment of junior high schools, the need to address the developmental concerns of the emerging adolescents remained. As is so often the case in education, frustration led to innovation and in the early 1960s the search for an alternative form of schooling began to gather steam. What emerged from these efforts was the middle school, an institution based on a curriculum designed to meet the developmental needs of its learner population (Wiles & Bondi, 1993). The essential part of middle school philosophy is recognition of the developmental changes in emerging adolescents. For this reason, the middle school philosophy calls for a dynamic rather than static design. A design which has the ability to be adapted to changes in the needs of young adolescents, to changes in technology and to social changes in society. Middle school philosophy is focused more on preparing for the future than on maintaining the traditions of the past. (p. 31)

Concerning the decline of junior high schools, Wiles and Bondi (1994) also proposed the following rationale:

There are many reasons why junior high schools failed to create a program to match the rhetoric. Already mentioned was the tremendous growth of the high school during this period, with the result that most junior high schools during the fifty-year period of its existence were located in old high school buildings. Also cited was the inability to train teachers for this new level, a problem that still exists in the 1990s. But most important was the inability of the junior high school to shake off the traditional content-focused curriculum that defined school success by courses mastered and carried out through a "high school-like" departmentalization of teachers and schedule. In fact, in its final years junior high schools, having activities such as marching bands, full-blown interscholastic events, proms, and cap-and-gown graduations, were often indistinguished from high schools. (p. 7)

William Alexander, who many recognize as the father of the American Middle School movement also identified the fallacy of junior high school. He made it clear that:

A review of the plans made and implemented yesterday leaves no doubt that the dominant assumption of past curriculum planning has been the goal of subject matter mastery through a subject curriculum, almost inextricably tied to a closed school and graded school ladder, to a marking system that rewards successful achievement of fixed content and unsuccessful achievement, to an instructional organization based on fixed classes in the

subjects and a time table for them. (p. 4)

In addition to the reasons mentioned by Lundt, Wiles and Bondi, and Alexander, there are other explanations for the emergence of middle schools. George and Shewey (1994), for instance, provided historic reasons for the establishment of middle schools. He identified the following reasons: (a) facilitating court-ordered school desegregation plans; (b) helping solve school building dilemmas; and (c) easing school district student population difficulties.

Wiles and Bondi (1993) also identified four additional factors as being contributory to such an educational transition:

1. During this period there abounded criticisms of American schools, classroom and teacher shortage, double and triple sessions, and soaring tax rates.
2. There was an effort to eliminate racial discrimination.
3. The number of school-aged children was on the increase.
4. Due to the bandwagon effect, one successful school tended to spur imitation.

All the above-mentioned factors combined together initiated the first wave of middle school development. Lundt (1993) pointed out:

The American middle school, which can trace its historical roots to the establishment of junior high school as early as 1909, began to develop as a unique format for educating preadolescents in the 1960s. The middle school-based philosophical writings of Lounsbury, Vars, George, Wiles,

Bondi, and Lipsits, along with the publication of Eichorn's "The Middle School" (1966) and Alexander's "The Emergent Middle School" (1968) assisted in the development of an education curriculum designed to meet the specific needs of the early adolescent. (Lundt, 1993, p. 54)

However, the transition from junior high to middle school has been by no means smooth during the past thirty years. Lundt (1993) mentioned:

Following the collapse of the American economy of the early 1970s and the resultant conservative demand for a "back to basics" curriculum, middle schools in many areas of the country became the targets of harsh criticism. The teacher/student team organization, interdisciplinary curriculum and exploratory offerings that are so much part of middle school concept, were viewed by many conservative educational critics as causes for declining test scores.

The basic concept of middle school operation came under attack. As the country began to recover from the fundamentalist, political, and religious backlashes of the 1970s and early 1980s, interest in the benefits of the middle school made a rapid recovery. Districts recognized that middle schools truly do have the potential to meet the needs of the emerging adolescent.

As the American public became more aware of the numbers of "latchkey kids" and the levels of "at-risk" behaviors they exhibit, the need for middle schools became more obvious. Districts once again began to abandon the junior high school format in favor of middle school, building

new middle schools and transforming old junior highs. (p. 55)

The Format of Middle School

Emphasizing adolescents' unique developmental characteristics and needs has been the foundation whereupon the concept of middle school is built. The concept of the ideal middle school, which centers around adolescents' developmental characteristics, is described as having the following features (AASA Educational Research Service Circular, 1967; ASCD Working Group in the Emerging Adolescent Learning, 1975; Carnegie Council on Adolescent Development, 1989):

1. It provides unique curriculum which meets adolescents' needs.
2. It teaches a core academic program.
3. It ensures success for all students.
4. It improves academic performance through fostering the health and fitness of young adolescents.
5. It provides students with opportunities to explore and develop basic skills.
6. It creates small communities for learning.
7. It teaches students how to learn.
8. It arouses students' belief in themselves.
9. It aims at student independence.
10. It provides good atmosphere which enables students to develop ability, seek for reality, measure evidence, describe conclusions, determine values, and discover new facts.
11. It provides a smooth transition from elementary to high school, thus

allowing adolescents to develop physically and mentally.

12. It regards students, and not curriculum, as the core of education.

George and Alexander, in their “Exemplary Middle School” (1993), pointed out the common elements associated with middle schools. According to George and Alexander, middle schools have the following characteristics: (a) classroom-based guidance—often in the form of advisory programs; (b) interdisciplinary team organization; (c) flexible scheduling, often in a block format; (d) a curriculum which emphasizes balanced exploration and solid academics, and arrangements which permit the development of longer-term relationships between teachers and their students; (e) heterogeneous grouping whenever appropriate; (f) instructional strategies which consider the characteristics of the learner; (g) a wide range of special interest experiences keyed to the development of middle school adolescents; and (h) collaboration between and among teachers and administrators as they work to improve middle school programs.

In addition, as the middle school teacher is the key to fulfilling the philosophy that guides the middle school movement, the middle school teacher must have a potent “chemistry” that is sympathetic to and compatible with a student population whose most striking feature is their diversity (Wiles & Bondi, 1993). Middle school teachers, therefore, are required to develop and possess specific competencies and characteristics. Lawrence identified six types of measurements for middle school competencies: (a) measurement of abstract information—a memory opera; (b) conceptual measurement—the ability to conceptualize abstract information in operational terms; (c) dispositional measurement—the disposition to act in a way that uses appropriate abstract information;

(d) structural performance—the ability to perform a defined task when requested;

(e) performance unconstrained by the measurer—the ability to employ certain skills when the situation calls for them; and (f) measurement of long-term consequences ensuing from performance—defining and measuring a competency by the long-term outcomes it affects in persons or events (as cited in Wiles & Bondi, 1993).

A thorough illustration of the characteristics and competencies of middle school teachers was provided by National Middle Association and National Association of Secondary School Principals (1995). According to their analysis, the effective middle school teacher exhibits the following characteristics (MMSA & NASSP, 1995):

1. is sensitive to the individual differences, cultural backgrounds and exceptionalities of young adolescents, and treats them with respect and celebrates their special nature;
2. understands and welcomes the role of advocate, adult role model and advisor;
3. is self-confident and personally secure—can take student challenges while teaching;
4. makes decisions about teaching based on a thorough understanding of young adolescents;
5. is dedicated to improving the welfare and education of young adolescents;
6. works collaboratively and professionally to initiate needed changes;
7. establishes and maintains a disciplined learning environment that is safe and respects the dignity of young adolescents;

8. ensures that all young adolescents will succeed in learning;
9. has a broad, interdisciplinary knowledge of the subjects in the middle level curriculum and depth of content knowledge in one or more areas;
10. is committed to integrating curriculum;
11. uses varied evaluation techniques that both teach and assess the broad goals of middle level education and provides for student self-evaluation;
12. recognizes that major goals of middle level education include the development of humane values, respect for self, and positive attitudes toward learning;
13. seeks out positive and constructive relationships and communications with young adolescents in a variety of environments;
14. works closely with families to form partnerships to help young adolescents be successful at school;
15. utilizes a wide variety of developmentally appropriate instructional strategies; and
16. acquires, creates, and utilizes a wide variety of resources to improve the learning experiences of young adolescents.

In addition to adopting a child-centered philosophy and providing competent teachers, there are other ingredients relevant to the middle school concept. Accelerating technological progress and social changes have educators realizing the increased complexity of middle school education. For one thing, middle graders are regarded to be victims of a changing society. They are misunderstood and neglected by society as a

whole. They are a most fragile social group, encountering deteriorating family structure, juvenile delinquency, crime and violence, sex and teen pregnancy, alcohol and drugs, as well as motor vehicle and other accidents (Wiles & Bondi, 1993; Carnegie Council on Adolescent Development, 1989). To prepare students with sufficient competencies to face a changing society and to create a safe and threat-free environment, middle schools must: (a) improve academic performance through better health and fitness; (b) re-engage families in the education of young adolescents; and (c) connect schools with communities (Carnegie Council on Adolescent Development, 1989).

School-based or site-based management is also regarded to be part of the middle school concept. School-based decision making is based on the principle that workers who have a voice in the decision-making process have a greater effect on the eventual success or failure of the enterprise. Over the past few years, school-based management has been a very popular educational innovation having been endorsed by the National Governor's Association and the Business Roundtable. It is seen as a way to improve schools by decentralizing the decision-making process and giving a voice in school policy governance to teachers and parents (Lundt, 1995).

Although research doesn't confirm that school-based management is the panacea for reform in schools, there are many attractive features inherent in its use. Lange (1993) pointed out its benefits: (a) it recognizes that all schools are unique entities that demand individual consideration for their needs; (b) each site determines needs and solutions to its problems; and (c) it allows schools to evaluate their effectiveness in relation to their populations as opposed to district or state norms (Lange, 1993).

These features may result in greater accountability for student learning, and this accountability fosters confidence to expand the scope of decisions that affect educational activity. School-based management can also bring about positive changes in attitude. For instance, Lange (1993) listed several effects that include commitment, confidence, cohesiveness, trust, professionalism, and respect. Hoyle (1992) cited positive attributes including improved job satisfaction, cooperation, and well-being. The result is a positive difference for all involved.

Carnegie Council on Adolescent Development (1989) mentioned that decisions concerning the experiences of middle grade students should be made by the adults who know them best. According to it, the empowerment of school staff is a necessary and desirable step in creating a transformed middle grade school that produces responsible, ethical, and participating future citizens. Middle schools can achieve these objectives by: (a) giving teachers greater influence in the classroom; (b) establishing building governance committees; and (c) designating leaders for the teaching process (p. 54-55).

Lundt (1995) also pointed out the benefit of site-based management:

Site-based management is a most appropriate model for building-level decision making in middle schools. It is both democratic and interactive. It has a tendency to draw teachers together into cooperative, interaction groups and promote the type of teaming that is at the heart of middle school philosophy. Site-based management is one educational innovation that need not fade away. (p. 16)

The Movement of the Taiwanese Middle School Education

The Movement of the Taiwanese Middle School Education

Taiwan, which used to be a province of China, was ceded to Japan in 1895 as a result of the Ching Dynasty's defeat in the Sino-Japanese War. During the Japanese occupation (1895-1945), the Japanese educational system was implemented all throughout Taiwan. In 1949, with the Japanese defeat in World War II, Taiwan was restored to the Republic of China. The Chinese educational system was then transplanted to Taiwan in 1949. The present education of Taiwan, therefore, has been influenced by both the Chinese and Japanese over the past century. It is necessary to examine the Japanese and Chinese secondary education movements so as to have a clearer picture of the development of the Taiwanese middle school education.

Taiwanese Secondary Education during the Japanese Occupation (1895-1945 A.D.)

The first secondary school (high school) was established in Taiwan, in 1885, and two years later another high school was founded in the same city. Both were established before 1895, when the territory of Taiwan was ceded to Japan (Wang et al, 1997).

No sooner had Japan taken sovereignty over Taiwan than it began to restructure the educational system. As far as secondary education was concerned, it was divided into three kinds: secondary (or high) schools for general education, vocational schools for professional training, and teachers' schools for training elementary school teachers.

The first five-year high school was founded in 1898. According to the Japanese government, the purpose of secondary education was to provide general education for colonial students. There were two types of secondary education: six-year high school and five-year high school. Elementary school graduates could attend five-year high school,

while the fifth grade students could attend six-year high school (Wang, 1963).

By 1944, the ruling Japanese government had set up 44 public high schools, including six private schools. Of the 28,442 students, 12,075 were native Taiwanese. Native Taiwanese students attended high school for four years, while their Japanese counterparts received five-year secondary education. Girls' high schools, however, provided only four years of education for Japanese students and three years for native Taiwanese students.

The first vocational school was not established until 1917. It was in 1917 that three vocational high schools were respectively set up in Taipei, Chiayi, and Taichung. These vocational schools, included industrial, agricultural and commercial curriculums, and provided a five-year education. By 1944, there were nine agricultural high schools, eight commercial high schools, nine industrial high schools, and two fishery high schools. In 1944, there were 14,688 students attending vocational schools, 10,272 of whom were native Taiwanese students (Wang, 1963).

As far as teachers' schools are concerned, the first three teachers' schools were set up in Taipei, Changhua and Tainan in 1899. Later on, more teachers' schools were set up to help train elementary school teachers.

Obviously, during their 50-year rule, the Japanese government did not establish junior high schools in Taiwan. The 3-3 secondary education was not implemented in Taiwan until 1945 when Taiwan was recovered by the Republic of China (Wang et al, 1997).

A Brief History of the Chinese Secondary Education Movement

The development of secondary education in China may be divided into four stages: (a) the emerging stage; (b) the stage of implementing the Japanese educational system; (c) the stage of implementing the American educational system; and (d) the stage of adjustment (Wang et al, 1997).

The four stages evolved through a period of 54 years, starting in 1895 and ending in 1949. In 1895, the Ching government set up “北洋學堂” (North Sea School), which included higher and lower levels, with the latter admitting 13 to 15-year-olds. Their main subjects were Chinese, English, history, geography, physics, and measurement.

The name “中學”(secondary school), however, was first coined in 1898. During this year, the three levels of elementary, secondary, and high education were officially established. From 1898 on, the three-level education system began to be implemented in China. During the emerging stage, secondary education consisted of three types of schools: 中學堂 (secondary school), 中等實業堂 (secondary vocational school), and 師範學堂 (teachers' school).

Then, in 1902, a new system which was based on the Japanese education system was adopted by the Ching government. According to this revision, the whole educational system was divided into three levels and seven stages, with secondary education occupying the second level. Secondary education was divided into secondary general school, secondary vocational school, and teachers' school. These schools admitted students ranging in age from 16 to 20 for a four-year education.

Again, in 1922, the government of the Republic of China revised the old system.

The new educational system was primarily an imitation of the American system. Although the new system retained three levels of education as the old one did, it divided years of education on the basis of student development. Therefore, children (preadolescents) of ages 12 to 18 attended secondary school, and post-adolescents (adults) of ages 18 to 24 attended higher education (Wang et al, 1997).

It was during this stage that junior high school was developed. According to the newly-revised system, junior high schools could provide two-year, three-year or four-year education, depending on school characteristics. Junior high school was primarily preparation for high school. It might also provide vocational training where necessary. During this period, high school education included general high school, agricultural high school, industrial high school, commercial high school, teachers' school, and home economics high school.

By 1932, secondary education underwent considerable readjustment. The multi-track system was converted into a tri-track system. From 1932 on, secondary education included only general secondary school, vocational secondary school, and teachers' school. General secondary school was again divided into two levels: high school and junior high school. According to this system, both could either be located in the same campus or independent of each other. Junior high schools admitted students of ages 12-15, while high schools admitted students of ages 15-18.

Vocational secondary education also included vocational high school and junior high vocational school. The purpose of junior high vocational school was to teach adolescents basic production knowledge and skills, thus enabling them to have

competencies for jobs.

According to this system, the graduates of junior high schools could be admitted to teachers' schools for another three years of education.

The Creation of Middle School (1968-Present)

The readjusted three-track, two-level secondary education had, ever since 1932, been implemented in China and lasted until 1949. This system was again transplanted to Taiwan in 1949, when the ruling KMT party was expelled to Taiwan. This system was not modified until 1968, when middle school was nationally established to replace junior high school and junior high vocational school. Indeed, the creation of middle school earmarked a new era in Chinese educational history.

Taiwanese middle school is basically a continuation of elementary school. It takes into concern the needs of jobs and life. Therefore, besides core subjects, it stresses vocational subjects and skill training. In essence, Taiwanese middle school is more similar to elementary school than to high school.

The philosophy underlying middle school is different from that underlying junior high school. First, middle school education is compulsory education. All the children are required by the Constitution to attend middle school when they are 12 (or have finished elementary education). They don't have to take an exam. Junior high schools, however, admitted those who were able to pass the entrance exam. Therefore, middle school students are more heterogeneous than junior high school students with regard to abilities, aptitudes and interests (Wang et al, 1997).

Second, junior high school was mainly high school preparatory education. In

contrast, middle school has more functions. As a result, middle school has a different curriculum design.

According to the Ministry of Education (1994), middle school students are supposed to attain the following objectives:

1. Cultivate self-esteem and respect for others; develop the virtues of diligence and responsibility; enculturate love for the family, hometown and country; develop the virtues of courtesy and justice.
2. Develop creative, logic and judgmental ability; increase problem-solving and society-adaptation ability; develop lifelong learning.
3. Develop physical wellness and mental determination; cultivate the ability to engage in leisure activity; improve physical and mental maturity and health.
4. Cultivate a sense of cooperation and democracy; improve interpersonal relations and developing brotherhood.
5. Increase aesthetic ability and creativity; cultivate love for life and an attitude toward maintaining the natural environment; enhance the meaning of life.

As far as the characteristics of the middle school curriculum are concerned, the Ministry of Education (1994) proposed that middle school curriculum should: (a) emphasize life and moral education; (b) emphasize democratic and civic education; (c) implement provincial education; (d) emphasize academic core subjects; (e) enhance art education; (f) increase the function of vocational training; (g) reflect the needs of future society; and (h) eliminate gender difference inherent in curriculum.

Factors Influencing Education

Over the past years Taiwanese students have been frequently found to win international competition awards, such as the World Olympia Math and Sciences, or score high on specific tests, such as GRE or TOEFL. Success stories of Taiwanese students have headlined both local and foreign newspapers from time-to-time. Phenomenally, Taiwanese students seem to consider school work to be their primary concern. Indeed, from the time they enter elementary school, they spend most of their time on study either voluntarily or involuntarily.

A survey conducted by Hsu (1997) revealed that Taiwanese elementary students spent 8.4 hours on take-home assignments every week, almost seven times as much as their American counterparts (1.2 hours) and more than two times as much as their Japanese counterparts (3.9 hours). In addition to take-home assignments, most Taiwanese elementary schoolers were also required to attend extra cram schools, piano classes and English classes, leaving them little time for games or sports.

Observably, as they move on to middle and high school, the amount of time they spend on study is sure to increase as competition intensifies. It is no wonder that most Taiwanese students are likened to ducks in a pressure cooker. There must be some rationales for such an educational phenomenon. Undeniably, cultural norms, social values and beliefs have together exerted tremendous influence on the way Taiwanese education has evolved. Also inherent in Taiwanese cultural norms, social values and beliefs are the Taiwanese historical and philosophical impacts on the meaning and value of life.

Therefore, the study of education from philosophical, historical, social and cultural

perspectives has long been the concern of researchers (Webb & Sherman, 1989; Ozman & Craver, 1992; Bruchacher, 1977; Pulliam & Patten, 1995). Viewing our present education in philosophical, historical, social and cultural contexts enables us to see the interrelations of these factors at work.

Philosophical Factors

An understanding of philosophical perspectives about education may enable us to:

- (a) become aware of education as more than school or classroom activities;
- (b) become aware that philosophy provides a comprehensive view of education;
- (c) study the historical development of philosophical ideas and their relation to education;
- (d) study the philosophical treatment and analysis of specific issues in education;
- (e) engage in continuing personal research, reading, and study in philosophy of education; and
- (f) develop a philosophical perspective and internalize it (Ozman & Craver, 1992).

Historical Factors

A study of educational history, according to Pulliam and Patten (1995) provides a basis for reassessing educational and cultural traditions and a guide for making judgment about the future. Chou (1977) also mentioned that by knowing educational history, we may establish a solid basis for present educational theories and practices, choose appropriate guiding principles from past experiences, and develop our love for and enthusiasm about education. Historical researches inevitably focus on thoughts of educators, social movements, institutions, governmental policies, and paradigm shifts.

Social Factors

The social context needs to be taken into concern, because the education we

provide for our children reflects the kind of society in which we live. If we fail to understand that connection, we will fail to appreciate the moral purpose of education. Further, as history began to accelerate, society soon outstripped its tradition. Science and technology produced an industrial environment that our traditional beliefs, morals and religions were ill-equipped to interpret and regulate (Webb & Sherman, 1989).

Cultural Factors

Since education is part of the cultural rubric, it is inseparable from other elements of culture. An educational study without taking into concern elements such as language, literature, customs and manners, or regime shift, might only provide an incomplete picture of the entity.

Garcia (1991) pointed out that cultural norms include cultural mores and folkways, which are again composed of values and beliefs, behavioral patterns, and tools. Garcia further pointed out that culture is learned. Everyone is born into a culture. When a child grows up, he or she needs to undergo socialization or enculturation. Education aims at transmitting socially recognized and accepted norms into children.

Saphir and King (1985) mentioned there are 12 cultural norms that may affect school improvement. These norms are identified as: (a) collegiality; (b) experimentation; (c) high expectations; (d) trust and confidence; (e) tangible support; (f) reaching out to the knowledge base; (g) appreciation and recognition; (h) caring, celebration and humor; (i) involvement in decision making; (j) protection of what's important; (k) traditions; and (l) honest and open communication.

As far as present Taiwanese education is concerned, we seem most likely to

transmit high expectations, reaching out to the knowledge base, appreciation and recognition, protection of what's important, and traditions to students at all levels of education.

Factors Influencing Taiwanese Educational Philosophy

Of all philosophies, Confucianism has exerted the most tremendous impact on the Chinese peoples. Second to Confucianism is the Mencius' philosophy. Both Confucius and Mencius have been regarded as the greatest teachers, because their teachings are both philosophical and educational (Hu, 1993; Fen, 1930; Ozman & Craver, 1992). Both philosophers spoke highly of education and held scholars and intellectuals in high esteem. Confucius, for example, regarded heaven, earth, emperor, parents and teachers as the five most important ingredients of the universe. Mencius would advise intellectuals to have great aspirations to be able to transmit knowledge to the world's peoples.

Earlier writings such as the Great Learning also equated educators with rulers. According to the Great Learning, the prerequisite for governing a nation is to master subject matter and acquire knowledge. Therefore, a ruler functions as an educator. Lao Tsu also mentioned that to be a philosopher king, one must first acquire knowledge to understand the Tao and then the tactics of governance. In their opinions, the very talented scholars should be elevated to the governing position because they are more enlightened (Hu, 1990; Fen, 1930; Feng & English, 1979).

Hanyu of the Tang Dynasty also highly accredited the value and function of educators in society. According to Hanyu, educators are supposed to preach the Tao, instruct knowledge, and solve questions for students. Intellectuals, therefore, deserve

social appreciation and recognition (Hu, 1990; Hsu Chou, 1997).

Historical Factors

Historically, the Chinese as a people have long valued intellectuals. Intellectuals (士), no doubt, have played one of the most decisive and influential roles in Chinese history. Over the past 25 centuries, intellectuals have been instrumental in education, predominant in politics, and responsible for the transmission of culture. Intellectuals have always occupied the topmost position of the social echelon, followed by farmers, workers and business people (Hu, 1990). In premodern China, to be recognized as a member of the intellectual class, one either had to produce outstanding works or pass the national exam. The latter seemed to be the most secure way to guarantee a person academic status, social appreciation and recognition. Under such circumstances, Chinese students had to spend all their time and effort on preparation for the nationally-sponsored exam. The Kechu system, or the national exam system, therefore, served as a means to screen the best talents from among the examinees. Those fortunate ones, apparently with higher cognitive ability, were selected to fill the governmental posts (Chou, 1997; Hsu & Chou, 1997).

The Kechu system, which was implemented from Shuei and Tang Dynasty to Ching Dynasty (606 A.D. - 1906 A.D.), was characterized by: (a) the concept of equality; (b) meritocratic bureaucracy; (c) emphasis on tradition; (d) the concept of standardization.

In fact, the Kechu system played such a vital role among ancient students that the goal of education was primarily preparation for the national exam. The following traditional sayings vividly reflect the mindset of ancient Chinese students:

1. 十年寒窗無人知，一舉成名天下知。

(“Being confined to my poor study room for 10 years, I stayed unknown. Now that I have passed the exam, I am famous all over the world.”)

2. 萬般皆下品，唯有讀書高。

(“The intellectuals are superior to other walks of life.”)

3. 學而優則仕。

(“Once you become an achieved scholar, you will be picked up for officialdom.”)

Cultural and Social Factors

Besides traditional practices such as the Kechu system, deep-rooted concepts such as Shitaifu thought, educational philosophies such as Confucianism, and Taiwanese social values, beliefs, and cultural norms have also exerted considerable impacts on education.

Basically, Taiwanese society is elite and meritocratic-oriented. This means that accomplished intellectuals are found to occupy either higher-ranked positions or high-paid professions. As a result, cultural norms such as high expectations, outreach to the knowledge base, appreciation and recognition, and traditions are transmitted to students. Students are constantly reminded that a degree and diploma are of the utmost importance in their careers.

As a result, education functions as an avenue to social status and recognition. Other functions of education such as moral development, aesthetic cultivation, and civic training are either neglected or ignored. Therefore, the whole Taiwanese educational system has been characterized by: (a) diploma and degree-orientation; (b) labeling and stigmatization of students; (c) systematic rigidity and formalism; (d) elitism and

meritocracy; (e) grouping and tracking; (f) indifference to individual needs; (g) lack of respect for individual students; (h) lack of diversification; (i) materialization and instrumentalization; and (j) exam and score orientation (Ma, 1996; Hu, 1994; Lee, 1996; Lin & Wang, 1995; Kim, 1996; Ma, 1996).

Taiwanese Middle School: Students' Preparation for High School

Ma (1996) mentioned that Taiwanese society holds the conception that the higher position on the academic ladder one occupies, the more likely one is to be socially recognized and appreciated. The educational stratification, as shown in Tables 1 and 2, is mainly based on students' cognitive ability. Hernstein and Murray (1994) mentioned that IQ is closely related to levels of education and profession in America. The same is true of Taiwan. Obviously, the more intelligent a student is, the more likely he or she is to receive a better education. The more prestigious school a student attends, the more likely he or she is to be successful both academically and professionally.

The situation being so, Taiwanese middle school functions at most as a screening process: graduates either enter high school, vocational-technical school or junior college. In 1996 only 24% of middle school graduates were admitted to high school, while 64% went to vocational school or junior college (Ma, 1997; Ministry of Education, 1996). (See Tables 1 and 2.)

Table 1

A Flow Chart of Taiwanese Education: Competitive-but-Equal Opportunity

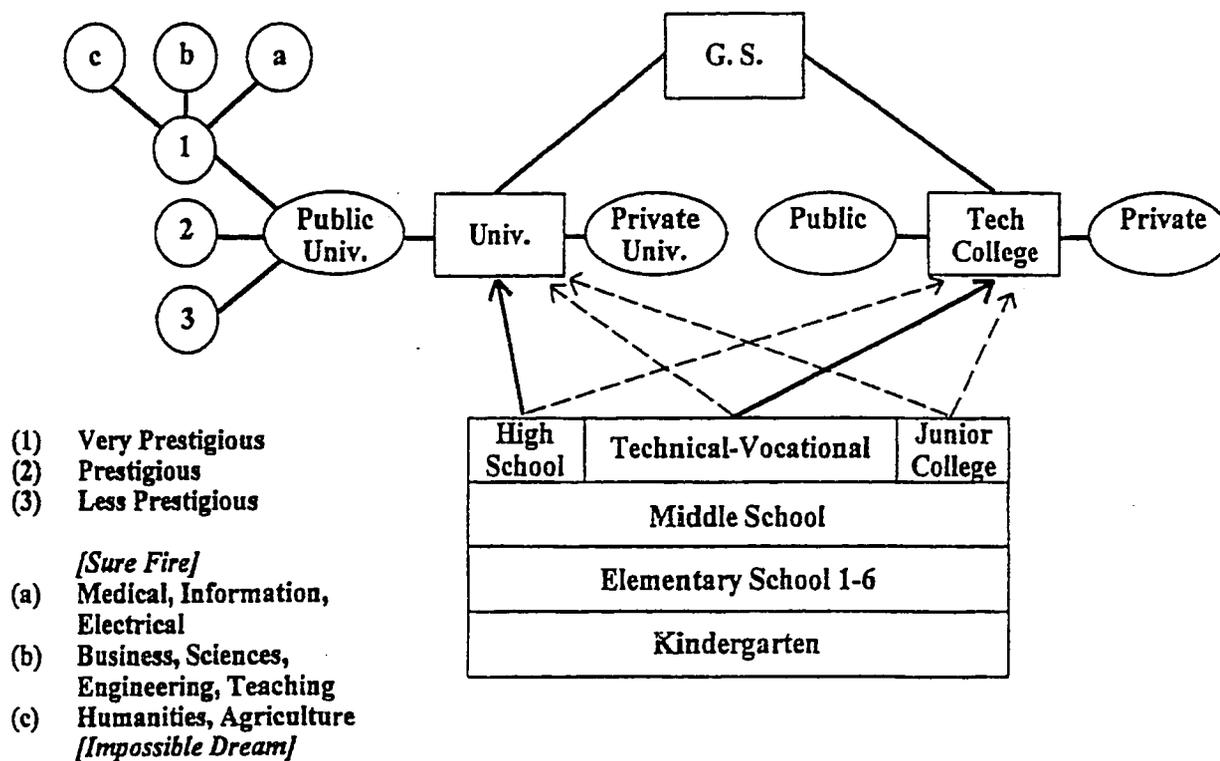
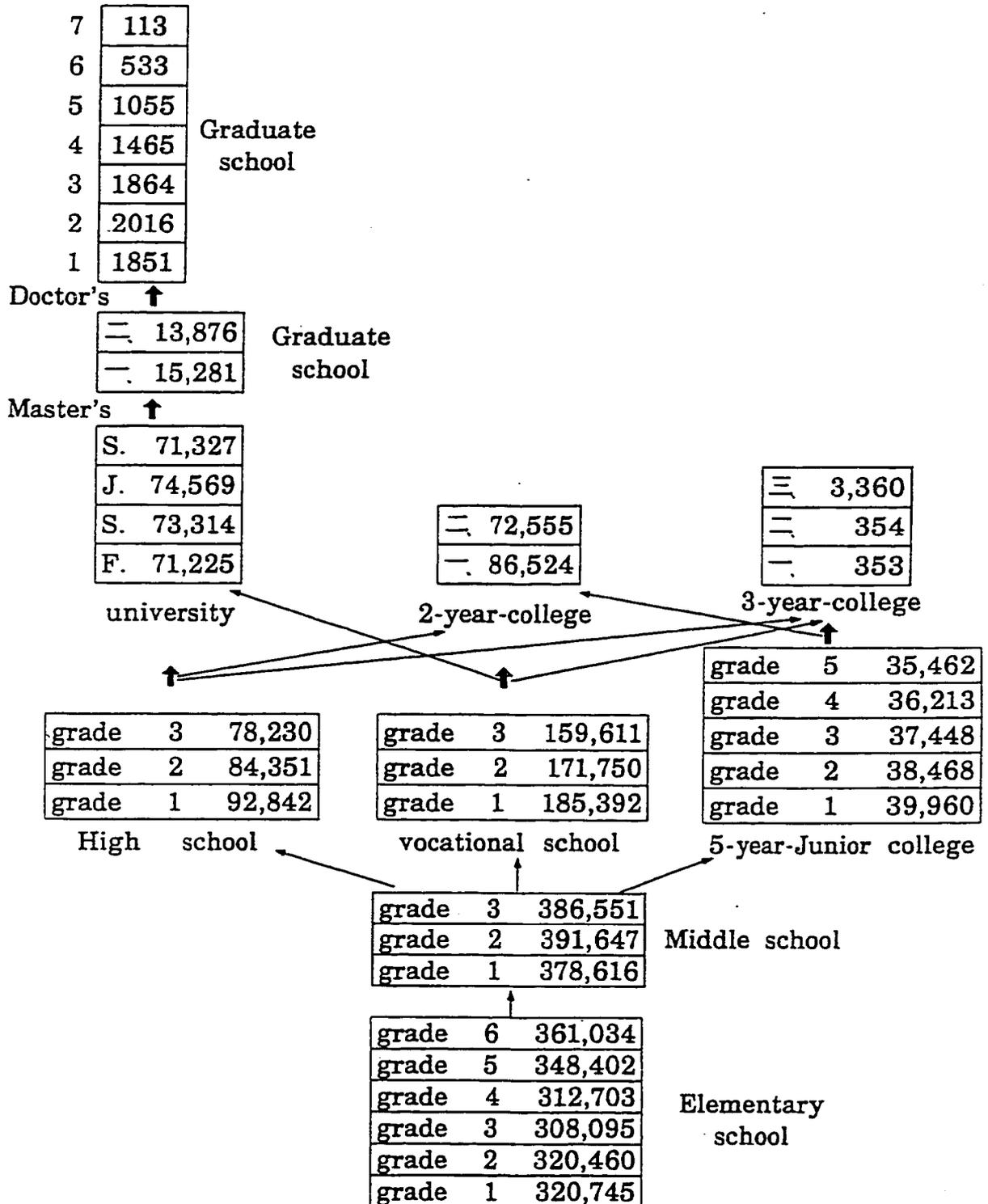


Table 2

Student Population Composite (Ma, 1996)



To enter high school, especially a prestigious high school, therefore, becomes the optimal goal of middle schoolers. Schools are definitely aware their ranking relies on their high school entrance rate. Teachers are aware their accountability is evaluated on the basis of their students' exam scores. Students and parent are convinced that failing to enter high school is humiliating and embarrassing. Indeed, cultural norms, social beliefs, and values are found to be instrumental. Social appreciation, recognition, and tradition together merge into an inescapable bond.

Indeed, as Chang (1997) lamented that the disoriented social climate, inadequate educational policy, parents' and teachers' blind acceptance of cultural and social norms have jointly resulted in “升學主義” (education for entrance exam). Taiwanese middle schools, almost without exception, are doomed to become instruments of high school preparatory education. High schools in turn focus mainly on college-preparatory education. In this arena of education, competition becomes the common language, and victory only belongs to those who are cognitively talented.

General Criticisms

Lee (1995) lamented that the current Taiwanese education is critically ill. Adolescents go to school early in the morning and return home late in the evening. Being weighted down by heavy lessons and assignments, students watch their adolescent years pass by. They are found to lack physical wellness and fitness. A large percentage of them become near-sighted. Their minds are filled with so much fragmented knowledge that they lack critical and creative thinking. Taiwanese youngsters lose their desire for virtue. Their spirits have been seriously contaminated by social evils and vices. The question becomes:

“How could we tolerate such a deteriorating society?”

Indeed, the admission rate to high school is so low (24%) that students are under extreme pressure. To the majority of the families of middle schoolers, middle school education turns out to be a nightmare! Classroom instruction is affected by examinations; teachers do not follow the schedule; schools implement grouping illegitimately; reference books are used in place of textbooks; examinations are given and cramming becomes prevalent (The Committee of Educational Reformation, 1996).

Life in a Pressure Cooker: Academic Overload

To understand how weighted down the average Taiwanese middle schooler is, we may refer to the following investigation conducted by the Formosa Foundation (United News, 1997).

According to the study, which interviewed via telephone 1,267 middle schoolers, life satisfaction ranks the lowest. They display a high degree of depression. The facts are that more than one-third undersleep, 57% of them take more than three exams a day, and one-third of them spend 10 hours on cramming per week. They have almost no time for family interaction.

To put it more concretely, these adolescents live a tough life. The study pointed out that 61% of the students sleep six to seven hours a day, 12% sleep less than five hours, and only 24% sleep eight hours a night.

The study further pointed out 27% of them take three exams a day, 24 % of them take two exams, and 12% of them even take five or more exams.

What is worse, 48% of the interviews spend the 10-minute class intervals

reviewing lessons and 90% of them attend cram school after their formal school hours. Every evening, 67% of the students spend another three hours on cramming or independent study and 24% of them spend more than five hours on cramming or independent study. In fact, middle school students are more weighted down than elementary school students, who are regarded as being more hardworking than Japanese and American students (Hsu, 1997).

Obviously, being weighted down by exams and cramming, students don't have time for leisure or sport, and they tend to lack physical well-being. Average middle school boys spend only 5.03 hours a week on sports, while girls have almost no exercise. The near-sightedness rate is very high (58.34%) (Ministry of Education, 1995).

Over-emphasis on academic achievement has exerted tremendous influence on certain groups of students. According to Chou (1995), Taiwanese middle school education results in the following disadvantaged groups: (a) low achievers with high IQ; (b) students with low learning effect; (c) mentally and physically disabled students; and (d) culturally disadvantaged students.

Chou further mentioned those who cannot live up to school and social expectations because of low academic achievement are likely to be labeled or stigmatized in the middle school setting. While higher achievers enjoy privileges and advantages provided by schools, underachievers are almost sacrificed by the system. Out of rage, those in the neglected and forgotten majority may resort to anti-society behaviors. It is small wonder, then, that Taiwanese middle school campuses and society are filled with crime and violence committed by middle schoolers (Chou, 1995).

Lin (1996) argued that since the same curriculum and instruction is provided to students with different cognitive abilities, problems are apt to emerge. Since we cannot provide an appropriate education to meet students' individual differences, we cannot but sacrifice those who fail to meet standards.

Developmental Tasks

Developmental tasks of human growth represent universal steps in a culture moving toward achieving adulthood. They suggest the kinds of concerns and needs experienced by young people between early childhood and adolescence. They indicate some areas where school programs can intervene in the process of development (Wiles & Bondi, 1993).

At the middle school level, the following developmental tasks are identified:

(a) social development; (b) promotion of physical development; (c) self-acceptance; (d) academic adequacy; and (e) aesthetic stimulation.

Also, certain basic needs appear to be common among middle school students:

(a) to be safe and free of threat; (b) to be recognized; (c) to be loved; (d) to be independent; (e) to be part of a group with identification and acceptance (Wiles & Bondi, 1993).

However, in a changing society, middle schoolers are often misunderstood and neglected, or victimized by deteriorating family structure, juvenile delinquency, crime, violence, teen pregnancy, alcohol, and drugs (Wiles & Bondi, 1993).

Whether Taiwanese middle schoolers experience or develop developmental tasks similar to those proposed by Havighurst is worth our concern. By understanding what

primary developmental tasks are, we may provide a more appropriate education. Chien (1997) conducted research by surveying Taiwanese middle schoolers' perceptions regarding the following tasks: (a) physical appearance; (b) value and morality; (c) responsible behavior; (d) career preparation; (e) marriage and family; and (f) interpersonal relations.

Chien's study revealed that middle schoolers answer positively on questions 1, 2 and 3. This means they are comparatively satisfied at their physical development and more conscious of cultural norms, social values and beliefs, and the standards of socially acceptable behaviors. In contrast, questions 4, 5 and 6 are the developmental tasks they are weak at. This means they display uncertainty of social development.

The findings of this research partially correspond to the research focused on by Chou (1995). Chou's research focused on factors which middle schoolers worry about most in their daily lives. According to Chou, middle schoolers regard academic problems as their number one worry. They are also worried about jobs, future, friendship, health, family economy, intrafamily relations, appearance, and personality. Together, the two studies revealed that academic adequacy and social development are middle schoolers' primary concerns.

Chien further warned that the Taiwanese middle school educational system has exerted negative influence on adolescents' performance on developmental tasks. Being exam- and score-oriented, Taiwanese middle schools emphasize cognitive ability and academic achievement to the neglect of normal developmental tasks. As a result, underachievers tend to become a neglected group. According to Chien, they have weaker

performances on almost all the developmental tasks than higher achievers. Predictably, they are unlikely to develop into adulthood in a normal way.

Havighurst (1972) urged that the goal of education consists in solving the problems inherent in adolescents' developmental tasks. The developmental tasks of education therefore should be emphasized by educators. Many believe that any provision of education to adolescents without adequate stress on developmental tasks is sure to be ill-fated.

Student Development Problems

Taiwanese middle school education has generated a lot of problems over the past years. Wang and Wu (1986) mentioned that of all levels of education, middle school is regarded as creating the largest number of problems. Huang (1996) sounded the alarm that middle school problems are considered to be the most serious of all levels of education. Indeed, Taiwanese middle school seems to have incurred more blame and criticism than appreciation and praise.

The major middle school problems as identified by the Summit Meeting of School Principals are listed below: (a) student nearsightedness; (b) student indulgence in video games; (c) large class size; (d) juvenile delinquency; (e) lack of competent teachers; (f) student addiction to pornography and comic books; (g) campus violence; and (h) over-cramming (Chang, 1997).

Of the listed problems, 2, 4, 6 and 7 may be classified as behavioral problems or deviant behaviors. These behavioral problems are regarded as being the most serious of all middle school problems (Huang, 1996).

Of the four deviant behaviors, juvenile delinquency and campus violence are considered to be the most threatening to both social and campus security.

Juvenile Delinquency

Over the past few years, newspapers have from time-to-time reported of middle schoolers committing crimes either within or off campus. Statistics show that over the past few years, juvenile delinquency had been found to be on the increase!

Table 3

Juvenile Delinquency Rate

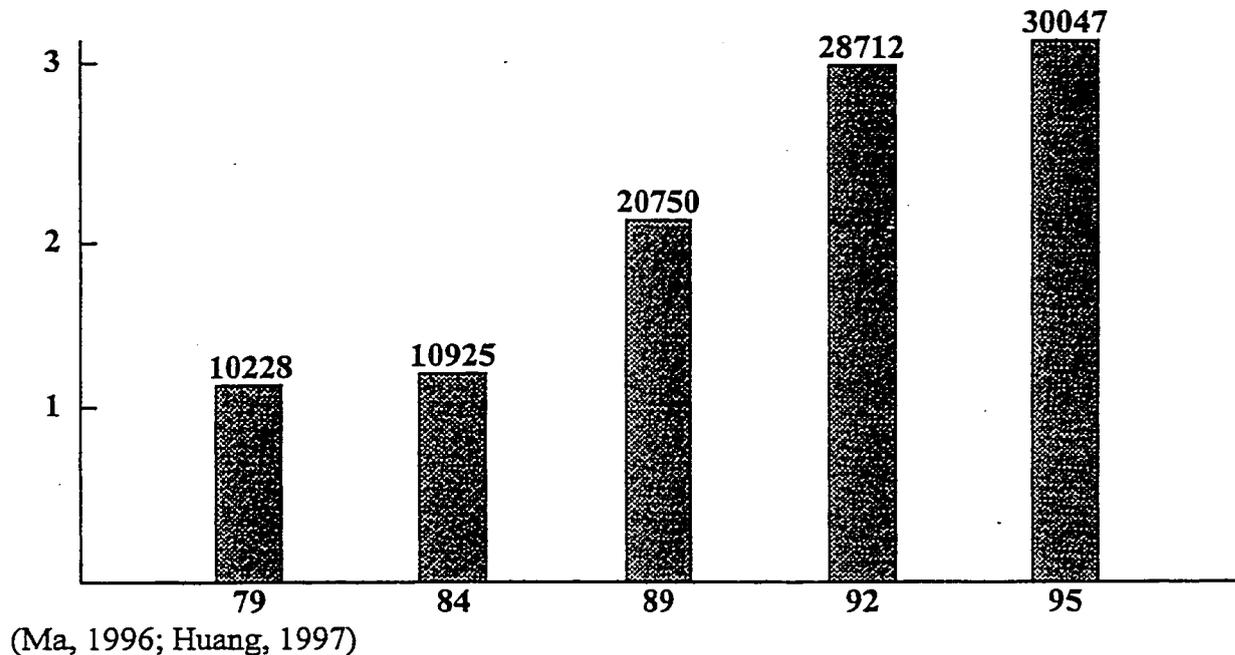


Table 3 shows the number of juvenile delinquents has tripled during the past 16 years.

According to research (China Time, 1997), theft is the number one felony committed by adolescents. Assault, fighting, rape, and joyriding are other major crimes frequently found among adolescents.

Chou's study (1995) also showed that of the 28,172 juvenile delinquents, 1,330 were guilty of injury. Surprisingly, 769 adolescents committed homicide. Further, of all the 7,001 rapes committed between 1984 and 1993, 67.8% were committed by adolescents (Chen, 1997).

Campus Violence

As far as campus violence is concerned, Chen (1993) pointed out that 37.9 - 47.5% of middle schoolers were fearful of campus violence. There were 3.2% of middle schoolers absent from school for fear of campus violence. The research further mentioned that those less likely to fall victim to campus violence have a higher degree of fear than those more likely to fall victim to violence. Wu's research (1996) pointed to the fact that lack of sense of campus security emerged as another serious problem among middle schoolers. Of the two schools she surveyed, 9.5% of school A students were worried about campus security, while 8.6% of school B students shared the same consensus. Indeed, campus violence or class violence is prone to result in the disruption of the many by the few, and classrooms and schools are likely to be held hostage, as pointed out by Shanker (1995). Wu (1996) warned:

The aftermath of campus violence can not be neglected. Not only are those violence-prone students problematic to school management and hazardous to other students, but they also will create more serious social problems once they graduate. They will form the habit of stealing, lack respect for others, use verbal and body assault at will. They patronize inappropriate places; they rampage public facilities. They have no social skills; they do

not develop sound interpersonal relations. (p. 40)

Dropouts

In addition to juvenile delinquency and campus violence, dropout rates also pose a serious problem. According to the Ministry of Education (1997), there were 5,601 middle school dropouts in 1996. The reasons for dropouts were identified as follows:

1.	Family factors	1,643	31.02%
2.	Academic factors	1,272	24.62%
3.	Job factors	697	13.10%
4.	Mental disability	42	0.079%

Middle schoolers who drop out of school are likely to become socially marginal because of their lack of preparation for social life. They are prone to create problems when they cannot be absorbed into mainstream society.

Gender Problems

Another significant, yet threatening developmental problem is in the area of gender relations. Obviously, despite sex education remaining a taboo topic in classroom instruction, gender-related problems have been found to be prevalent on and off campus. Sex-related crimes have also been on the increase. According to Chen (1997), there were 7,001 reported rapes between 1984 and 1993, of which 67.8% were committed by adolescents. Wu (1995) also pointed out that early adolescents are prone to fall victim to sexual harassment or assault. In a survey of 336, 10 to 12-year-olds, 126 of them admitted being sexually harassed or assaulted.

Sex-related problems may result from inadequate school sex education. A

questionnaire was administered to a total of 5,500 middle school students regarding students' knowledge of sex (Ministry of Education, 1997).

The survey revealed that: (a) 47% of girls and 35% of boys obtained sexual knowledge from school; (b) 20% of middle school girls and 30% of middle school boys obtained sexual knowledge from friends; and (c) 65% of boys and 49% of girls admitted watching R-rated movies.

Obviously, the majority of students obtain sexual knowledge from sources other than school. Those who obtain information from friends, tapes or elsewhere, are likely to develop misconceptions about sex. These disoriented pieces of sexual knowledge simply impede students' development, both mentally and physically.

Wang (1997) attributed inadequate sex education to the following reasons: (a) educational authorities adopt passive attitudes toward sex education; (b) school teachers are not highly motivated to teach students about sex; and (c) educational institutions and mass communication media do not provide enough support.

Rationale for Deviant Behaviors

There are explanations as to the worsening deviant behaviors among Taiwanese middle schoolers. Huang (1996) regarded deviant behavior of middle schoolers as resulting from curriculum and instruction. The Taiwanese middle school curriculum is characterized by lack of vertical articulation and a high degree of complexity and difficulty. The less intelligent are therefore hard-pressed by it. Huang mentioned that students who frequently meet with frustrations and failures might give vent to their anxiety, pressure and depression by turning to deviant behaviors. Our middle school

curriculum, according to Huang, has the following deficiencies: (a) lack of knowledge-based curriculum; (b) lack of articulation between different stages; and (c) too much content overlapping.

Chou (1995) also pointed out the middle school curriculum is too fragmented and departmentalized. There are so many subjects for students to learn, and every subject teacher sets up his or her standard for students to live up to. Overlapping is frequently found to exist between disciplines. Students simply do not have enough time and energy to meet individual teacher's demands. As a result, students may become frustrated and depressed.

Middle School Teachers

According to surveys, many teachers of young adolescents today dislike their work. All too often, assignment to a middle grade school is the last choice of the teachers who are prepared for elementary and secondary education. Teachers may regard duty in the middle grades as a way station. It is true that some teachers of adolescents lack confidence in their ability to teach these students.

For some, this feeling comes from the structure of middle schools: They feel overwhelmed by the impersonal nature of the environment, and they feel ineffective with large number of students they have to teach. For still others, it comes from a lack of training related to early adolescence, coupled with the pervasive stereotype regarding the near impossibility of teaching young adolescents (Carnegie Council on Adolescent Development, 1989).

Attributes

Truly, it is by no means easy to become a successful middle school teacher. Given the unique characteristics of early adolescents, middle school teachers are required to possess specific attributes and competencies.

Wiles and Bondi (1993) mentioned that middle school teachers need to have the following attributes: (a) an honest desire to work with this age group; (b) flexibility and adaptability; (c) enthusiasm; and (d) a good sense of humor, compassion and tolerance.

Competencies

Gordon Lawrence identified six types of measurement for middle school competencies: (a) measurement of abstract information; (b) conceptual measurement; (c) dispositional measurement; (d) structured performance; (e) performance unconstrained by the measurer; and (f) measurement of long-term consequences ensuing from performance (Wiles & Bondi, 1993).

Characteristics

In his Delphi analysis investigation of outstanding middle school teachers, Hsieh (1997) found four primary characteristics of outstanding Taiwanese middle schools:

1. They have effective communication and counseling ability, and they are willing to spend time on interactivity with students.
2. They treat students in objective, fair and open manners.
3. They have rich professional knowledge and teaching techniques.
4. They are duty-bound and devoted to teaching; they demonstrate love, patience and endurance.

Hsieh further listed four areas of competence outstanding middle school teachers possess:

1. They are able to maintain good relationships between themselves and students. They create a humorous and lively atmosphere, adopt reasonable discipline, respect students, and help students build self-concept.
2. They create effective teaching and learning environments. They implement techniques and methods which facilitate teaching and learning.
3. They possess effective instructional techniques. They know how to plan and design curriculum.
4. They have a proactive attitude toward teaching and are aware of the standards of teaching. They are competent enough to raise instructional activities.

The major concern is whether the majority of middle school teachers have the above-mentioned attributes, competencies and characteristics. There is also concern as to whether middle school teachers can live up to the standard envisioned by Wiles and Bondi, Lawrence, and Hsieh, given the present condition of Taiwanese middle school education.

Teachers' Instructional Problems

On the average, a Taiwanese middle school consists of 1,410 students and each class is composed of 41 students (Ministry of Education, 1996, 1997). Compared with the American model, Taiwanese middle schools and classes are much larger. Translated into instructional activities, large class sizes may mean more ineffective teaching and low teaching quality.

Chou (1995) mentioned that under the present educational environment, teachers are really weighted down by intensive class instructions. They are also held responsible for students' exam scores and admissions to high school. To cope with these problems, they cannot but adopt lecture as the major instructional mode. The interactivity between teachers and students depends mainly on test scores. As a result, scores become a criterion whereby teachers evaluate students. Effective interactivity in the classroom situation is almost an impossibility.

Sun and Lee (1997) examined teachers' classroom instructional behaviors in detail. In their investigation of middle school teachers' verbal behaviors in instructional situations, they found that lecture is adopted most frequently, with occasional implementation of questioning. Middle school teachers tend to give authoritative instruction and feel uncomfortable with discussion. On occasion they may consider students' opinions with a certain degree of modification. They seldom accept students' feelings; neither do they inspire or motivate students. They would prefer students to remain quiet in the classroom situations, listening, taking notes, and doing exercises. Classrooms are seldom found to be situations where heated group discussions are encouraged.

Sun and Lee further pointed out that teachers pay so much attention to lectures that they are ignorant of two-way communication. Students' responses are not really expected by teachers. In all, they stress verbal expressions more than other forms of expressions. In a typical middle school classroom, questioning, inspiring, extending and accepting are seldom adopted.

Chou and Chen (1996) listed the problems middle school teachers encounter:

1. As far as classroom activities are concerned, teachers tend to adopt lecture and examination, paying less attention to students' individual learning.
2. After class, teachers have to spend most time on students' academic and disciplinary problems. They also spend the rest of the school day correcting assignments and test papers. Consequently, they cannot afford any time for teaching preparation, personal research, and professional growth.
3. Most teachers have to teach three to four hours a day to a minimum number of 120-160 students.

Chou and Chen pointed out that these three problems result in the following instructional fallacies:

1. Teachers' overuse of lecturing method affects students' opportunity for participation and critical thinking.
2. Teachers have difficulty teaching to a large class, especially a heterogeneous one, because students are cognitively different to a great extent.
3. Teachers are so dependent on reference books, exams and cramming that the normal instructional activities are impeded.
4. Teachers overemphasize students' cognitive ability, which results in students' disciplinary problems, which again effect classroom activities.
5. Teachers, especially class-counseling teachers, are hard-pressed by various duties. Besides treating problems, and grading assignments and test papers.

They have to anticipate all kinds of accidents; they are always confined to crowded offices. They must face parents who tend to have different viewpoints of education. They have to cope with the pressure exerted by their principals and other administrators. They lack opportunities for further study. Some teachers are so frustrated and depressed that they end up in hospitals.

Teachers' Roles in the Total Institution

Teachers, who are members of powerful institutions, or so-called megastructures, tend to develop a sense of uncertainty which is called alienation. Webb and Sherman further mentioned that alienation exist in different forms: (a) powerlessness; (b) meaninglessness; (c) normlessness; (d) isolation; and (e) self-estrangement.

The Taiwanese educational system has long been characterized by top-down bureaucratic administration (Lin & Wang, 1995; Mu, 1995; Wang, 1997). The educational system is so rigid, stratified, and constrained that the function and authority of teachers, including middle school teachers, are twisted to a great degree. In the school, the principal, who is appointed by the provincial or local bureau of education, assumes absolute authority in various aspects of school activities. In such a system, teachers' scope and degree of authority are quite limited. They become policy performers and deliverers at most (Wang, 1997).

Mu (1995) pointed out that such a pyramid structure of school administration stresses order more than anything else. As a result, it lacks freedom, equality and efficiency needed by our open and changing society. Undoubtedly, such a highly

centralized top-down bureaucracy tends to result in teachers' sense of powerlessness, normlessness, meaninglessness, isolation and self-estrangement (Wang, 1997). Indeed, according to Lin and Wang (1995), Taiwanese teachers regard their principals as assuming too much administrative authority. Principals are found to assume instructional leadership despite the fact that they are regarded primarily as administrators, not teachers. Teachers may be doubtful of principals' competencies in every aspect of school activities. As Chan (1995) pointed out, Taiwanese principals are mainly evaluated on the basis of obedience and subordination to educational policy and regulation, and the ability to manage routine affairs. Their professional knowledge, however, is not highly valued by their superiors. To the teachers, principals seem to care more about how to perform superordinates' commands. They seem to pay more attention to buildings, facilities and equipment. They seem to be less mindful of teachers' rights and security. Indeed, to most teachers, principals are bureaucrats (Lin & Wang, 1995).

Teachers' lack of professional autonomy may be observed in other situations. Wu (1997) identified two factors which may affect teachers' professional autonomy:

1. The restrictions resulting from administrative by-law and regulation.
2. The unreasonable interference from school administrators.

For instance, he pointed out that "The Student Record Evaluation of Middle School" sets up rigid criteria for teachers to adhere to. Also, school administrators are sometimes found to change class schedules or interfere with teachers' teaching methods. Teachers are likely to develop a sense of antagonism because of administrators' lack of respect for their professional autonomy.

American Middle School: Preparation for the Future

In view of the exponential rate of technological, social and cultural changes, preparing our youth for the 21st century has aroused the concern of educators (Carnegie Council on Adolescent Development, 1989; NASSP, 1996; Longstreet & Shane, 1993; Lundt, 1996). In responding to the question, "How can the young be prepared for the future wisely?", we have to reconceptualize school curriculum. Reconceptualizing the curriculum, therefore, should be a rational enterprise. The kinds of studies to be pursued in schools ought to be determined by some reasoned analysis of our basic philosophy, the needs of children in the present, and the most likely circumstances of the future. Unfortunately, this is not a likely route in the United States because the curriculum design is deeply embedded in cultural mindsets (Longstreet & Shane, 1993). Indeed, an educational system designed to meet the needs of an agricultural or industrial era would be out of date in a subsequent age of information (Pulliam & Bowman, 1974).

In spite of the fact that American education in the 1990s looks very much the same as it did in the 1890s (Lundt, 1996), there is one area of American education that adopts a futuristic approach to curriculum.

According to Lundt (1996), American middle school fortunately has the ability to address the concerns of futurist critics. Lundt mentions that middle school philosophy is focused more on preparing for the future than on maintaining the traditions of the past.

Based on Lundt's analysis, American middle school curriculum has the following characteristics:

1. There are teachers who have a belief in the potential of humanity. In this

aspect, they are similar to futurists, who believe that people have the capacity to shape the future.

2. The middle school concept contains forward-looking , dynamic, and programmatic philosophies. Education is the best way to create positive options for the future. Middle school teachers consider themselves as facilitators and encourage students to actively participate in the learning process. They have a pragmatic rather than ideological approach to life.
3. Middle school regards issues as interdisciplinary. Middle school teachers understand the limitations of the type of planned curricular fragmentation. They believe it is futile to separate subjects artificially. Successful middle schools recognize the relationships among the subject areas and promote a interdisciplinary approach to both teaching and learning.
4. The middle school curriculum is future-oriented. Inherent in the curriculum concept of middle school are (a) the ability to think clearly and evaluate and analyze information, (b) an understanding of our environment and the world in which we live, (c) the ability to access information and solve problems for which the answers are not known, (d) a plan to enhance personal competence through involvement in lifelong learning, and (e) education for social diversity, global citizenship, and an understanding of the individual and society.
5. Middle school teaches students to understand the environment. Students are encouraged to engage in projects that focus on protecting the

environment, conserving energy, and recycling renewable resources. They are asked to go off campus to work sites within the natural environment.

6. Middle school teaches students to access information and solve for the unknown. By implementing team teaching and cooperative learning activities, teachers can help students learn creative problem solving. Open-ended questions are preferred to right-wrong questions. Middle schools use computers and other technology to facilitate data processing.
7. Middle school emphasizes personal competence through lifelong learning. Middle school students are not only involved in the developmental transition from childhood to adulthood, they are also experiencing the most rapid rate of change in human history. They need to be provided with a model of lifelong learning. The middle school, which is better than any other current educational model, addresses this essential need.
8. Middle school stresses diversity and global citizenship. Truly, middle school curriculum addresses issues such as the role of the individual and society, the importance of social diversity, and the responsibilities associated with global citizenship. Team teaching, cooperative learning activities, and advisory programs provide good opportunities for students to discuss and explore diversity and global citizenship issues, and to determine their related responsibilities in the world of the future.

In view of the above characteristics, Lundt (1996) further concluded that:

Effective middle school educators should take pride in the fact that they are

not only meeting the current developmental needs of their young adolescents, but they are also meeting their educational needs to become adaptive lifelong learners. While it is true that there are no traditional links between futurism and middle schools, it is apparent that both futurists and middle school educators are striving to prepare for the coming millennium in very similar ways. (p. 34)

In fact, the curriculum characteristics mentioned above correspond to the characteristics of futures programs in elementary and secondary schools as pointed out by Pulliam and Patten (1995):

1. Interdisciplinary approach — the overarching feature of the future in the curriculum is the interdisciplinary focus.
2. Problem analysis focus — most futures courses attempt to help students analyze the problems around them.
3. Faith in human ability to control the future — futures courses attempt to develop insight into the major current problems, in an effort to show what must be done to prevent disaster and ensure a desirable tomorrow.
4. Open-ended, inquiry-based methodology — futures courses attempt to avoid the mere imposing of facts and information on students.

Conclusion

Carnegie Council on Adolescent Development (1989) pointed out:

The emerging adolescent is caught in turbulence, a fascinated but perplexed observer of the biological, psychological, and social changes swirling all

around. In grouping for a solid path toward a worthwhile adult life, adolescents can grasp the middle grade school as the crucial and reliable handle. Now, the middle grade school must change, and change substantially, to cope with the requirements of a new era—to give its students a decent chance in life and to help them fulfill their youthful promise. This is a daunting task but a feasible one. This report will be a great help to those who wish to make this goal a practical reality. (p. 14)

Indeed, providing appropriate education to meet the individual needs of adolescents is by no means an easy task. As educators, we need to know the developmental characteristics of adolescents, the major problems with Taiwanese middle schools students, and teachers' major instructional problems. Most importantly, we need to know what the possible solutions to these problems are.

As Fullan and Stiegelbauer (1991) mentioned, individuals need to take responsibility for becoming experts in the change process. They should give constant attention to both the content and process of reform or change. Recognizing the elements necessary for implementing change will be beneficial in the reform efforts of the nation.

In order to transform or renovate the Taiwanese intermediate education, educators need to navigate the difficult space between letting go of old patterns and grabbing on to new ones. Educators, especially middle school teachers, should take the challenge and choose to adopt supportive attitudes. In fact, they should play a proactive role in the paradigm shift.

CHAPTER 3

METHODOLOGY

Chapter 3 includes the population selection process used in the study, instrument development, and the process of data collection and analysis. The analyses supplied answers to the five research questions. It is believed that the information generated would provide a knowledge base for Taiwanese middle school reformation.

The following questions guided the investigation:

1. Do teachers agree with the critics of Taiwanese education?
2. Do the teachers identify the same problems with the educational system that the critics do?
3. What do the teachers believe needs to be changed in Taiwan's educational system?
4. Do teachers believe that American middle school concept will work in Taiwan?
5. Do the teachers believe that curriculum of the American middle school will meet the needs of Taiwanese students in the future?

Population and Sampling

This study utilized judgmental sampling to select twenty respondents. By using judgmental sampling, the researcher hoped to select the appropriate respondents for the investigation, thus obtaining a more comprehensive and reliable result.

The sampling process proceeded as follows:

1. Four cities were selected for the investigation. The four cities were Taipei,

(population: more than 3 million); Taiching, (population: more than 800 thousand), Changhua (population: more than 200 thousand), and Taitung (population: more than 100 thousand). Therefore, this study included a metropolitan city, a big city, a small city, and a rural city. Demographic and regional differences were taken into consideration.

2. From each city, five schools were selected. The selected schools were different from each other with respect to school size and ranking. Thus, school differences were taken into consideration.
3. From each selected school, one teacher was chosen for the interview. Teacher selection depended on recommendation or the teacher's willingness to participate.
4. This study included teachers of different genders and subjects. There were male and female teachers of language, science and math.

Instrumentation

This study implemented standardized open-ended interviews as its research method. By utilizing interviews the researcher hoped to obtain more in-depth first-hand data. Also, an inventory of interview questions should include: (a) experience/behavior questions; (b) opinion/value questions; (c) feeling questions; (d) knowledge questions; (e) sensory questions; and (f) knowledge/ethnographic questions (Patton, 1990).

The verbal expressions (answers) of each question by the 20 respondents were collected, analyzed and compared to obtain similarities and differences. Instead of using the Likert-scale, this study allowed the respondents to express their experiences, opinions,

feelings, knowledge, and sensory perceptions to a certain extent. The interviewees' verbal answers were recorded by the researcher's handwriting, because handwriting is regarded to be the best recording technique allowing the researcher to control the pace of question-answer (McMillan & Schumacher, 1989).

The interview protocol lasted for approximately two hours. There was no change of question sequence. The researcher gave the respondent a copy to read first. After the respondent's reading, the researcher started the interview. For clarity and precision of the answer sheet, only content words and topic-related words were recorded. When all the sub-questions were answered, the researcher showed the respondent the answer sheet. The respondent checked to see if there was any misunderstanding or recording error. The completion of the interview didn't become effective until the respondent signed his or her name.

With approval of the researcher's dissertation committee and the Human Subjects Committee of The University of Montan, the interview instrumentation was subjected to pilot study. Two teachers who would not participate in this study were invited to complete the pilot interview and an accompanying critique sheet (see Appendix B) regarding the construction, clarity and relevancy of interview items. The pilot respondents were similar to those in the study sample.

Data Collection

Arrangement to pilot the interview instrument was made through two identified teachers at the pilot site. Upon their agreement to participate in the pilot interview, they were informed of the time and site. The selected teachers were informed by the researcher

the purpose and use of the pilot interview. They received a letter from the chairman of the committee explaining the significance of the study. They were asked to complete the interview questions and the critique sheet. Analysis of the pilot study, including the necessary test for reliability and validity, and all necessary revisions was completed.

Starting thereafter, further arrangements were made for the completion of the survey. The 20 respondents from the schools in four cities were visited on a daily basis. Similarly, they were first informed of the time and place of the interview. On the day of the interview they were reacquainted with the nature and purpose of the study. The interview was held either in or out of the school, depending on the respondent's preference. All the data collected from the teachers was analyzed and synthesized after the last interview was completed.

Data Analysis

As an interview-based qualitative study, the present research analyzed the verbal expressions of 20 respondents. Under each research question, the verbal expressions of the 20 respondents were compared and contrasted. Their comments and opinions were categorized for analysis. The benefits of implementing verbal expressions for analysis are as listed below (Lin, 1994):

1. It enables the researcher to understand the respondent's knowledge base of the questions.
2. Respondent's feelings, attitude, and tone may be reflected in the verbal expressions.
3. The respondent's willingness to talk about the question and enthusiasm

about education may also be reflected.

4. The respondent's are more likely to provide unexpected answers.

First, the researcher analyzed all the verbal expressions objectively. All the verbal expressions were analyzed in terms of their denotation. The researcher neither overstated nor understated any verbal expression. Neither did the researcher distort the meaning of words, phrases or sentences. Verbal expressions which were deemed vague or ambiguous were followed up with clarifying questions.

As far as each research question was concerned, respondents' comments or opinions were quoted for reference. Similar comments or opinions were grouped together. Quotations were listed in a sequential order. Comments or opinions which were found to be most positive or stressful were followed by those which were less positive or stressful. Interpretive narration was utilized for the purpose of comparison and contrast among the respondents.

Second, the research analyzed was only relevant to the present study so as to attain reliability and validity. To attain analytic reliability and validity, the researcher referred to:

1. The theories of educational reform or change provided in Chapter 1 will serve as a framework with which the respondent's awareness of and attitude toward change may be compared. The researcher sought to determine: (a) whether the teachers are cognizant of the exponential rate of change; (b) whether teachers are resistant to change; (c) whether the teachers are reactivists, preactivists, inactivists or interactivists; (d) whether they manifest tension; and (e) whether teachers followed a decision-making

process.

2. The data, provided in Chapter 2, including middle school movement in America and Taiwan, and the problems with the Taiwanese middle school education, will be compared to teachers' answers. By analyzing the teachers' answers and comparing them with other criticisms, we may come to understand the cognitive discrepancy between the teachers and non-teachers.

Following is a description of the research questions and the narrative analysis for each.

1. Do teachers agree with the critics of Taiwanese education? By analyzing and comparing all the respondents' verbal answers, the research hopes to obtain answers to the following questions:
 - (a) Are teachers aware of the criticisms in general?
 - (b) What are the teachers' viewpoints of and attitudes toward the critics?
 - (c) Do the teachers think the critics have done justice to Taiwanese education?
2. Do teachers identify the same problems with the educational system that the critics do? By analyzing teachers' verbal answers and by comparing them with the problems mentioned in Chapter 2, the research hopes to answer the following questions:
 - (a) Are the teachers aware of the same problems?
 - (b) Besides the problems identified by the critics, what other issues are

regarded by the teachers as being more worthy of mentioning?

3. What do the teachers believe needs to be changed in Taiwan's educational system? By collecting verbal answers and by comparing them with Chapters 1 and 2, the research hopes to obtain answers to the following questions:
 - (a) What aspects of the educational system need to be changed most?
 - (b) Why do the teachers think they need to be changed?
 - (c) Can the teacher prioritize the changes?
4. Do teachers believe that the American middle school concept will work in Taiwan? By analyzing the teachers' verbal answers, the research hopes to answer the following questions:
 - (a) What do the teachers think about the American middle school concept?
 - (b) Do they believe it can be implemented?
 - (c) For those who don't believe, what are their reasons?
5. Do teachers believe that the curriculum of the American middle school will meet the needs of Taiwanese students in the future? By analyzing the teachers' verbal answers, the research hopes to obtain answers to the following questions:
 - (a) What do the teachers think about the curriculum of the American middle school?
 - (b) Do they believe it will meet the needs of Taiwanese students in the

future?

- (c) For those who don't, what are their reasons? What do they think will meet the needs?
- (d) What do the teachers think about the curriculum of the American middle school?

In all, the analyses of the five research questions constituted a very formal and logistic process: identification of the problems, awareness of the need for change and suggestions of solution, and finally the probability of implementation. The analyses, the research hoped, would yield trustworthy results.

CHAPTER 4

FINDINGS

Chapter 4 presents the findings of the study in narrative form accompanied by statistic where appropriate. The findings are based on the verbal responses of the 20 interviewees. The 20 interviews were conducted between July 27 and August 26, 1998. The first two pilot interviews were conducted on July 16 and 19 respectively. One was conducted in Changhua and the other was conducted in Taitung. Both teachers in the pilot interviews agreed that as far as the research questions were concerned:

1. It took approximately two hours to complete the interview.
2. All of the terms used in the research questions were clear and understood.
3. All questions were relevant to middle school education.
4. Most of the questions could be answered without too much deliberation.
5. Very few of the research questions made the interviewees feel uncomfortable.

The critiques of the pilot interviews validated the purpose and design of the research questions and henceforth made possible the forthcoming interviews. The following 20 interviews were subsequently administered from July 27 to August 26 in four regional areas: the Taipei area, the Taichung area, the Changhua area, and the Taitung area. The sample included inner-city, suburban, and rural school teachers (see Appendix C for the map).

All the 20 interviewees were judgmentally selected. Random sampling was inapplicable because the research needs to include teachers from different regional areas,

subjects, genders, and years of teaching. Only by judgmental sampling could the sample be composed of proportionate groups. By using judgmental sampling, the researcher was able to have teachers who represented their groups. The interviewees were recommended by school administrators, teachers or the researchers' educational associates.

Demographics

Years of Teaching

As mentioned in Chapter 3, this study aims at obtaining data from experienced teachers. The median years of experience in the sample was 19.6, with the most experienced teachers having 31 years and the least experienced having three. Of the 20 interviewees, 13 had more than 20 years of teaching, with only two having less than 10 years.

Table 4

Years of Teaching

Group	Number	Percentage
Teachers with less than 10 years	2	10%
Teachers with 10-19 years	5	25%
Teachers with 20 or more years	13	65%
Total	20	100%

Geographic Region

Teachers were selected from four distinct areas of the country of Taiwan. Four distinct geographic areas were identified, from which approximately the same number of

teachers was selected. Of the 20 interviewees, five were in the northern area (Taipei), five were in the midwestern area (Taichung), five were in the midwestern area (Changhua), and five were in the southeastern area (Taitung).

Table 5

Geographic Regions of the Teachers

Group	Number	Percentage
Taipei area (north)	5	25%
Taichung area (midwestern)	5	25%
Changhua area (midwestern)	5	25%
Taitung area (southeastern)	5	25%
Total	20	100%

Gender

Of the 20 interviewees, 12 were female and 8 were male.

Table 6

Teachers' Gender

Group	Number	Percentage
Female	12	60%
Male	8	40%
Total	20	100%

Subjects

The sample included teachers from the disciplines of English, Chinese, math,

science, social studies, physical education, and school counseling. Their composition may be seen in Table 7.

Table 7

Subjects of Teachers

Group	Number	Percentage
English teacher	6	30%
Chinese teacher	2	10%
Math teacher	2	10%
Science teacher	3	15%
Social studies teacher	3	15%
School counselor	3	15%
Physical education teacher	1	5%
Total	20	100%

Interview Procedures

Once the researcher was informed of the name and telephone number of the interviewee, the researcher immediately called the teacher, explaining the purpose of the interview. Only four recommended teachers declined the researcher's invitation for an interview. Those who accepted the invitation expressed great enthusiasm concerning the study. They expressed pride for being recommended by administrators, friends or other teachers.

Most interviews were conducted in coffee shops or restaurants close to the

interviewees' home or school. The relaxed atmosphere of the coffee shops or restaurant made the interviews more effective and comfortable. During the two to three hours of the interview, all the teachers appeared eager to express their feelings, understanding, and perspectives. They appeared to be open-minded and very candid. Their answers indeed, proved to be valuable and reliable. They said they enjoyed personal interviews much more than filling out survey questionnaires.

Research Question Findings

The Research Questions

Each interview dealt exclusively with the following five research questions:

1. Do teachers agree with the critics of Taiwanese education?
2. Do the teachers identify the same problems with the educational system that the critics do?
3. What do the teachers believe needs to be changed in Taiwan's educational system?
4. Do teachers believe that the American middle school concept will work in Taiwan?
5. Do teachers believe that the curriculum of the American middle school will meet the needs of Taiwanese students in the future?

Research Question 1:

Do teachers agree with the critics of Taiwanese education?

The names of the critics mentioned in Chapter 2 were first introduced to the interviewees. These critics are academic leaders, social leaders, professors of education,

and practicing teachers. The main points of their criticisms were also briefly introduced to the interviewees. Upon reflecting on who and what these critics were and what they said about education, the majority (16) of the interviewees responded positively.

Only four of the 20 teachers expressed any form of disagreement. They qualified their responses with statements such as:

1. "I agree with most of them."
2. "In principle (general), I agree with them."
3. "In principle, I agree with them, but I have to consider the details."

Of the 20 teachers, none gave completely negative responses.

Research Question 2:

Do the teachers identify the same problems with the educational system that the critics do?

In order to bring to focus what the current educational problems with Taiwanese middle schools were, the researcher reviewed the problems mentioned in Chapter 2. The problems identified by these critics were: (a) social values and cultural mindset; (b) intellectualism; (c) exam-oriented education; (d) the pressure placed upon students; (e) student development and behavior; (f) curriculum; (g) campus violence and discipline; (h) teacher development and autonomy; and (i) school administrative leadership.

When asked if the above-mentioned problems identified by the critics really existed, none of the interviewees answered in the negative. For those who identified the same problems, their responses varied from such one-word answers such as, "Yes," to complete statements of agreement. In all, 14 of the interviewees identified the same set of problems as those identified by the critics.

Only six teachers were found to qualify their agreement as in the following statements:

1. "In general, I identify these educational problems."
2. "In principle, I identify the same problems."
3. "I identify part of these problems."
4. "I identify most of the problems."

Table 8

Degree of Identification

Group	Number	Percentage
Affirmative	14	70%
Less Affirmative	6	30%
Total	20	100%

Research Question 3:

What do the teachers believe needs to be changed in Taiwan's educational system?

This question elicited passionate responses from the teachers. On the average, each teacher suggested 5.6 necessary changes, with the largest number of recommended changes being eight. The smallest number was three. In total, the 20 interviewees proposed 111 necessary changes, which were found to fall in 10 areas.

The 10 areas were: (a) curriculum; (b) teacher qualifications/teacher training; (c) administration; (d) parent and community; (e) student characteristics; (f) examination; (g) class size; (h) grouping; (i) urban-rural gap; and (j) society.

The suggested changes in individual areas are shown in Table 9.

Table 9

Areas of Change Needed

Group	Number	Percentage
1. Curriculum	31	27.9%
2. Teacher Qualifications/Teacher Training	19	17.1%
3. Administration	14	12.6%
4. Parent and Community	12	10.8%
5. Student Characteristics	9	8.1%
6. Examination	6	5.4%
7. Class Size	5	4.5%
8. Grouping	5	4.5%
9. Urban-Rural Gap	5	4.5%
10. Society	5	4.5%
Total	111	99.9%*

*Due to rounding, total percentage may not equal 100.

Curriculum

As far as curriculum was concerned, the interviewees listed an over-emphasis on cognitive education, articulation, and extra classes as areas for change. One Taichung teacher mentioned, “We don’t have character education, life education, [or] democracy education. Our curriculum is based on cognitive ability. We neither value method nor emphasize tradition.” Similar responses were:

1. “Curriculum needs to enculturate value concepts, normal development of character, and potential development.”
2. “Physical education and vocational training deserve more attention.”
3. “Curriculum should be improved to meet social trends. There should be clear curriculum objectives.”
4. “Curriculum should also emphasize labor education.”
5. “We impart too much data to students—too much content for the average student. Take history for example, students attend history class only one hour a week, yet there is so much to cover. Students simply have no time for creative or critical thinking.”

Articulation was also regarded by some teachers to be unsatisfactory. As a Changhua teacher put it, “There is a problem with vertical articulation. For example, English II is so much more difficult and complex than English I that you can see the score disparity.” A Taipei teacher also mentioned,

There is a lack of vertical articulation between elementary and middle school Chinese, and between middle school and high school Chinese. Average middle school students simply cannot catch up with Chinese language instruction. This is because elementary Chinese does not prepare them for middle school Chinese.

Concerning the length of the school day, most teachers agreed that we needed to reduce it. Typical of their responses were:

1. “We should abolish after-school classes and summer-winter classes.

Neither students nor teachers are interested in such extra classes.”

2. “There are so many classes a day, from 7:30 a.m. to 5:00 p.m., that students simply have no time for rest or leisure activities. Heavy curriculum makes students’ nervous and anxious.”
3. “We should prevent students from over-cramming.”

Teacher Qualifications / Teacher Training

Next to curriculum, teacher preparation was the second area where more changes were suggested by the interviewees. Those who talked about teachers focused on the areas of professional knowledge and development, overload, autonomy, retirement, and salary.

Most teachers were regarded as lacking sufficient professional knowledge. One Taichung teacher said, “Teachers lack professional knowledge. Their teaching methods cannot meet students’ individual needs. Nor are they willing to attend staff development programs. They are not able to design their own curriculum.”

Similar responses were as listed below:

1. “We have to raise teachers’ knowledge levels. Teachers need to be able to use different teaching materials, such as multi-media. They should use different teaching methods other than lecture. They should attend more staff development programs.”
2. “There should be more staff development programs. Summer school is okay, but not very convenient. I would suggest in-service sessions held by the school. Local higher education professors would provide updated

information.”

3. “Teachers need to receive counseling courses in addition to their professional knowledge.”

Some teachers regarded current retirement system and practices as being unable to meet their needs. A Taipei teacher advised, “We have to improve the retirement system. Those who are old and incompetent should be advised to retire. The government should have enough budgeted for pensions.” Other teachers responded likewise:

1. “We have to improve the retirement system so that old teachers may have timely retirements [in order] to protect both teacher and student rights.”
2. “Improve the retirement system.”
3. “Teachers’ salaries should be raised.”

Concerning teachers’ autonomy and rights, some teachers voiced concerns. As a Taitung teacher mentioned, “Teachers’ expertise and rights should be respected.” A Taichung teacher also insisted that teachers’ professional knowledge deserves respect. Most teachers, according to a Taipei teacher, were the silent majority, being unaware of their rights. Neither were they aware of educational policies or laws.

Administration

The interviewees who talked about administrators, be they at the school, local or governmental level, tended to have negative impressions of them. The interviewees complained about administrative interference, top-down decision making, shortage of staff, fluctuating educational policy, and principal recruitment.

Principals’ leadership was criticized by some interviewees. A Taichung teacher

would like the principal to adopt humanitarian leadership. Most administrators, according to the teacher, had the following negative leadership behaviors:

1. "Some administrators are not service-oriented. They tend to turn against teachers, thus creating ill school climate."
2. "School administrators, who assume absolute authority, like to dominate teachers. They regard teachers as a means to school success."
3. "School administrators should not interfere with teachers' teaching methods. Neither should they evaluate teachers on the basis of test scores alone."
4. "We should abolish autocratic leadership. Policy should be based on law. It should not change on the basis of a man's favor."
5. "School administration should aim at serving students, not school policy. School administration should not be dictated by policy, which changes so frequently."

Concerning policy, a Taichung teacher stated that:

Educational policy should not fluctuate. As a rule, new Ministers of Education tend to turn out different educational policies, thus replacing the old ones. Our policy changes too frequently for teachers to follow. Further, the decision of educational policy should include teachers' participation. There should be no top-down decision making. Decision makers at the top position may not really understand the problems. Teachers should have the right to participate in policy making.

Some interviewees also complained about having to assume extra duty besides teaching. According to a Taitung teacher, “Administrative duties should not be assumed by teachers, who are already pretty occupied.” Similar answers included:

1. “There should be enough staff members.”
2. “In rural areas, shortage of staff members results in teacher overload. Teachers have to take over extra duties, thus affecting their teaching quality.”

With respect to administrator selection, a Changhua teacher suggested that the recruitment and dismissal of principals and other administrators should be decided by teacher committees. Only then would principals be prevented from being too powerful and dominant.

Parents and Community

In the fourth area, 12 necessary changes were mentioned concerning parents and community. Like administrators, parents and community did not win teachers’ favor. They suggested that parent re-education, less parental interference, single parenthood, and community support were four sub-areas needing change.

Concerning re-education, a Taipei teacher insisted, “Parents need to be re-educated. They should not hold the idea that schools must meet all their needs.” Another Taipei teacher expressed similar concerns. A more detailed description came from a Changhua teacher: “Parents and communities influence student behaviors. If they don’t change their behaviors, how can we expect students to change their behaviors? Therefore, parents need to be re-educated.”

With respect to parental interference, a Taipei teacher said, “They interfere with school affairs too often,” and “They place too much pressure on teachers.”

Similar answers came from other teachers: “Parents only care about test scores. For this reason, teachers are forced to adapt teaching methods to help students obtain high scores, and therefore satisfy parents.”

Single-parenthood, according to two interviewees, leads to poor academic achievement and behavioral problems.

1. “Single-parent families have a negative influence on students. Boy students from single-parent families tend to be naughty and girls tend to be emotional. They have poor academic performance and more behavioral problems.”
2. “In eastern areas, many students come from single-parent families. They are brought up by grandparents, as their moms or dads need to work in western cities. They tend to become mischievous. They develop monetary problems early.”

Finally, a Taipei teacher urged parents and community members to fully support current educational policy.

Student Characteristics

Concerning this area, teachers suggested different approaches to better educate students. They mainly stressed values, behavior and needs. A Taichung teacher mentioned, “We should respect student rights.” Other teachers suggested that important value concepts needed to be conveyed to students, because as one Taipei teacher put it, “Most

students lack morality; they are practical-minded. They do not study for study's sake." To help improve this situation, the interviewees provided the following strategies:

1. "Students need to have a value concept, team spirit, filial piety, neatness, honesty, and courtesy."
2. "Students need to be trained to do things voluntarily."

As far as behavioral problems were concerned, three teachers provided the following advice:

The biggest problem with the middle school is student behavioral problems. They are ignorant of school regulations. Teachers are afraid of any conflict so they become indifferent to student behaviors. As a result, there is no ethic value, no meaningful education.

One interviewee, who was aware of the problems, had the following advice, "I don't think it is good to abolish corporal punishment, though scholars and parents object to it."

Examinations

Five interviewees mentioned the need to change the middle school examination system. High school entrance exams, according to a Changhua teacher, should also be changed. The teacher in question said, "First, we need to change high school entrance exams. Even basic competency tests are not very ideal. We had better adopt the recommendation-based admission exam."

Another teacher from Changhua objected to "teaching to the test." the teacher insisted that this practice deeply affected teachers' teaching methods. In addition to

abandoning “teaching to the test,” schools should also improve their test techniques and reduce test frequency, according to two Taipei teachers.

Class Size

Although mentioned only five times by the interviewees, class size is nationally regarded as an obstacle to high quality education. How many students should there be in each class? According to a Taichung teacher, the class size should be taken into consideration. The teacher explained it well, “There should be no more than 30 students in a class. On the one hand, teachers have less overload; on the other hand, we may attain high quality teaching.” A similar answer was given by a Taipei teacher, “We have to have small classes. A class of 40 or more students is really too many. Only in a class of 30 or fewer students may the teacher take good care of each student, keep the class in good order, and react to students’ emotions.”

Ability-Grouping

Over the past couple of years, the government of Taiwan has mandated that middle schools follow a no-grouping policy. Schools which do not abide by the policy are subjected to administrative penalty. The implementation of this policy has had its drawbacks.

Five of the interviewees agreed with the philosophy underlying this policy, but they still suggested changes. As a Changhua teacher mentioned, “Although no-grouping (heterogeneous classes) takes good care of students’ psychological development, the teacher has to spend a lot of time on ill-behaved students, thus affecting teaching quality.”

A Taipei teacher further explained,

We have to change no-grouping classes. Students with less cognitive ability cannot catch up with others. Schools have no idea how to provide remedial instruction. Being unable to catch up, low-achieved students become frustrated and as a result may turn mischievous. This creates a vicious cycle.

Also, teachers would become exhausted in a heterogeneous class and students could not benefit from each other, according to a Changhua teacher. A Taichung teacher responded pessimistically. He said, "No-grouping is only a slogan. In reality, it cannot work."

Urban-Rural Gap

Three of the interviewees suggested that the urban-rural gap needs to be improved. Understandably, these teachers came from rural schools. A Taitung teacher mentioned that in very rural areas, owing to insufficient administrative personnel, teachers had to assume extra jobs. For instance, an English teacher served simultaneously as director of the registrar's office. The salary, according to this teacher, nevertheless remained unchanged. Such rural schools, this teacher further pointed out, were short of laboratory equipment and appliances. This phenomenon was further confirmed by two Changhua teachers; they complained about shortage of governmental subsidy and community resources in rural schools.

Society

The last area where changes were deemed necessary was society. Society, according to these interviewees, exerted influence on students. "Social value systems need

to be changed. We should not regard students with poor academic achievement as inferior. Such value concepts influence adolescents' normal development. Further, our social environment is worsening. Bad environments lead students in the wrong direction.”

A Changhua teacher added, “Society as a whole should have higher sense of morality—they need moral education.”

Research Question 4:

Do teachers believe the American middle school concept will work in Taiwan?

With regard to this question, the verbal responses of the 20 interviewees were found to concentrate on four categories:

1. Their impressions of the middle school.
2. Whether it is working at present or will work in the future and if not, how long it will take to implement such a model?
3. What factors might impede the implementation of this model?
4. What they suggest to implement such a model.

The following responses explicate the findings:

1. Their impressions of the American middle school model.

After the middle school model was explained to them, three interviewees praised it by saying:

- (a) “The American middle school concept is very humane and lively.”
 - (b) “This middle school perspective is very acceptable.”
 - (c) “The American system and perspectives are very good.”
2. Whether it is working at present or will work in the future.

When asked if the American middle school concept will work in Taiwan, the majority of the teachers expressed reservations. Only five of the interviewees sensed signs of this concept being partially adopted in Taiwan at the present time.

Their responses were:

- (a) "Some of the ingredients have been adopted by our school, only to little effect."
- (b) "Actually, we are adopting some of the ingredients such as advisory programs."
- (c) "Our education reformation committees are approaching this model."
- (d) "Our educational system is reforming in this direction."
- (e) "Taiwan is moving in the direction of the middle school concept."

The majority of interviewees (15) seemed to be less confident of its applicability at the present time or in the near future. As a Changhua teacher put it, "As far as I am concerned, this model cannot work in Taiwan at all, for at least 10 years." Similar quotes are listed below:

- (a) "It takes 10 years to implement it."
- (b) "This model won't be applicable until 2001."
- (c) "It is impossible for our school to adopt it."
- (d) "It is very difficult to implement such a model in Taiwan."

3. Factors influencing the implementation of the middle school concept and suggested strategies.

Five factors were identified by most of the interviewees as impeding the implementation of this concept. They were:

- (a) Entrance examinations.
- (b) Teachers' mindsets and training.
- (c) Parents' perspectives about education..
- (d) School buildings and facilities.
- (e) Social concepts and values.

Regarding (3a) "Entrance examinations," a Changhua teacher suggested, "We need to abolish the exam-oriented system so as to implement integration, no-grouping, and block scheduling." Similar expressions are quoted below:

1. "This American model won't be widely adopted in Taiwan unless we abolish our joint entrance exams."
2. "We have to abolish high school entrance exams."

With respect to (3b) "Teachers' mindsets and training," a Taichung teacher mentioned, "Teachers might object to it for lack of competencies." Also, old teachers had difficulty adapting to this model as they lacked interest in research and team spirit. Other teachers responded likewise:

1. "Our teachers prefer to work alone. They are not interested in empowering; therefore, they may not like site-based management."
2. "Teachers, who are weighted down by parental value concept, may object to it."
3. "Teachers' competencies need to be considered."

To solve this problem, a Changhua teacher suggested that teachers change their teaching styles. Other interviewees, such as a Taipei teacher, insisted that we need to make teacher training the first concern. Another Taipei teacher stated: “Teachers are not trained to work in teams or use interdisciplinary curriculum. Therefore, they need to have staff development and enhance their discussion abilities.”

As far as (3c) “Parents’ perspectives about education” was concerned, those who perceived their resistance mentioned:

1. “Our parents are not deeply involved in education.”
2. “Our parents care about scores; they cannot accept individualized grading or narrative reporting. They try to influence teachers’ grading methods.”

To improve this situation, a teacher provided the following advice: “Our parents need to change their perspectives about education—entering high school should not be the only choice for their kids.”

“School buildings, facilities and class size” (3d) were also regarded as factors affecting the implementation of the American middle school concept. As a Changhua teacher put it clearly, “We don’t have enough school and community hardware to support this model.” Similar answers are identified below:

1. “Our campus is too small and our school facilities are limited.”
2. “There are insufficient facilities and budgets, and the library does not function well.”
3. “Our present equipment and facilities cannot meet the requirements of interdisciplinary instruction and block scheduling.”

4. “Our class student numbers make it difficult for us to implement this model.”

Only one teacher in a rural Taitung school saw the middle school as a possibility. He said, “Taitung, with its small class size and big campus, may have little difficulty implementing this model. Other areas may have difficulty.”

Regarding (3e) “Social values and concepts,” some interviewees also recognized a major influence. To implement this model, school administrators needed to abandon traditional concepts, according to a Changhua teacher. Similarly, a Taipei teacher said, “We have to abandon our traditional value system. Also, the whole society needs to understand the strengths of this model.”

A Changhua teacher held a more pessimistic viewpoint. She mentioned, “Our national character tends to stress self-image and authority, thus affecting team work.” The situation being so, a Taichung teacher answered, “When the whole social environment becomes mature, it will be time for the middle school concept.”

Research Question 5:

Do teachers believe the curriculum of the American middle school will meet the needs of Taiwanese students in the future?

All of the 20 interviewees saw value in this model for Taiwanese students. Twelve teachers expressed great enthusiasm for this futuristic-oriented curriculum. As a Taipei teacher said, “The future-oriented curriculum is very good.” A Taitung teacher mentioned that this curriculum was so ideal that Taiwanese education would have to adopt it. Similar quotes are listed below:

1. "The futuristic-oriented curriculum really meets the development of Taiwanese education."
2. "The futuristic-oriented curriculum meets our needs very much."
3. "Taiwanese students need such a forward-looking curriculum."
4. "I think it will meet our needs completely."
5. "Taiwanese education should move in this direction."

One of the interviewees mentioned that the futuristic-oriented curriculum was introduced to him by some professors. He said, "I have attended some seminars in which the professors urged us to promulgate similar curriculum models."

Needless to say, the interviewees saw obstacles which might influence the implementation of this curriculum. The impeding factors were also the same as those mentioned in Question 4. Representative of these interviewees' strategies to eliminate these obstacles were:

1. "If we abolish our college and high school entrance exam, we will be able to implement it."
2. "We have to emphasize teacher training, educational concept, teaching materials and methods."
3. "Society needs to have conceptual changes. Curriculum should be no longer exam-oriented. Government should not dominate education. Communities should be partners of school education."
4. "To implement it, parents, teachers and administrators should change their perspectives about education."

Despite teachers' overall acceptance of this curriculum, four of them suggested a certain degree of modification to make it more workable in Taiwan. The interviewees would like the curriculum to include art, human relations, and humanitarian studies. Their suggestions were:

1. "The futuristic-oriented curriculum should also contain humanitarian concepts of art and nature."
2. "In addition, the traditional family-centered culture should be the basis of curriculum. Students need to appreciate traditional culture and art."
3. "However, it should also include human relations, moral relations, and I-others relations."
4. "This curriculum should also contain spiritual development and harmonious life. Over-emphasis on science and technology might lead to destruction."

Summary

The problems with Taiwanese middle school education were further identified by the interviewed teachers. The current condition of middle school education, according to these teachers, was indeed faced with these problems, among others. To reduce or even completely eliminate these problems was by no means an easy task. On the contrary, it was time-consuming and energy-exhausting, as these interviewees understood only too well. These middle school teachers, who knew students best, provided the most valuable information. They prioritized changes needed by pointing out the extent to which middle school education was in urgent need of change. They reached consensus with respect to the American middle school concept and futuristic-oriented curriculum. The two concepts,

once implemented, would benefit Taiwanese middle schoolers to a great extent. The implementation of these two concepts, they agreed, depended on the full participation of all stakeholders—administrators, teachers, parents, community and students. They agreed the conversion was a paradigm shift, which did not become fully operable until all parts of the system were changed and aligned with the new paradigm.

CHAPTER 5

CONCLUSIONS, DISCUSSION AND RECOMMENDATIONS

Conclusions

The following conclusions are based upon results of the analyses of the data and reported findings of this study.

1. The majority of interviewees agreed with the educational critics, who provided objective and factual reports of the problems encountering Taiwanese middle school education.
2. Concerning the prevalent problems with Taiwanese middle school education, the majority of interviewees agreed that they did exist.
3. The areas of change, identified by the 20 interviewees, were worth consideration. The interviewees mentioned some areas more frequently than others, thus implying the degree of change needed. For example, curriculum, teacher qualifications/teacher training, administration, parents and community, and student characteristics were the five major areas of change identified by the 20 interviewees.
4. Almost all the interviewed teachers saw the difficulty of adopting the American middle school concept because of various obstacles such as entrance examinations, teachers' mindsets and training, parents' perspectives about education, school buildings and facilities, and social concepts and values.
5. The futuristic-oriented curriculum was unanimously agreed upon by the

interviewees, who regarded this curriculum as both meeting adolescents' developmental needs and preparing them for the 21st century.

Discussions

Moving toward the model middle school, according to Wiles and Bondi (1994), involves five stages: (Stage 1) Present condition; (Stage 2) awareness stage; (Stage 3) experimentation stage; (Stage 4) adoption stage; and (Stage 5) desired stage.

The whole process of conversion might take at least four years, as could be seen in the case of Dade County, Florida. There is tension between an awareness of what is, and a vision of what could be, as Peter Senge (1990) suggested.

Emerging from the present study and the above assumptions are the following issues worth discussing:

1. According to Chang (1997), the Summit Meeting of School Principals identified eight major problems with Taiwanese middle school education. The problems are listed below: (a) student near-sightedness; (b) student indulgence in video games; (c) large class size; (d) juvenile delinquency; (e) lack of competent teachers; (f) student addiction to pornography and comic books; (g) campus violence; and (h) over-cramming.

Obviously, the present study shows that the 20 interviewees' perspectives about the problems with Taiwanese middle school education differed from those of the principals. The cognitive discrepancy between the two groups will inevitably exert negative influence on school management. Teachers were found to care more about what was close to them, leaving other problems to administrators. They cared more about

curriculum, administrative power and interference, their own rights, parental interference, and student achievement and behavioral problems. Principals seemed to care more about student physical fitness and disciplinary deviation. Therefore, both groups looked at middle school education from different viewpoints. Obviously, both groups need to reach consensus.

2. Interestingly, the interviewees seemed to have poor impressions of other teachers. According to some interviewees, middle school teachers were not motivated to develop professionally. They either lacked sufficient knowledge, adopted only one teaching method, or failed to communicate socially. It is urgent, therefore, that the majority of middle school teachers be provided incentives to help them develop professionally and socially. Otherwise, they will suffer considerable creative tension if they are forced to change.
3. Over the past few years, various educational policies and practices have been proposed, enacted, revised, and then ignored or abandoned. Not only are teachers unaware of what is new, but the administrators are unable to explain explicitly what needs to be done. This will inevitably create tension or even resistance. There needs to be consistency, durability and publicity, once any educational law, regulation or policy is decided. There needs to be policy which is not only visionary, but also provides skills, incentives, and necessary resources to policy performers. Above all, the government should have action plans for all participants to follow. Without these

elements, policy will probably become a dream.

Recommendations for Action

Based on the findings and conclusions emerging from this study, the following recommendations are made:

1. Since Taiwanese middle school education is going in the direction of the American middle school concept and futuristic-oriented curriculum, more advice may be obtained from American experiences. As far as Wiles and Bondi's conversion model is concerned, Taiwanese middle school education is found to be positioned at Stages 1 and 2. If Taiwan is to implement the child-centered and futuristic-oriented model, it has to take the following two factors into concern:
 - (a) It takes several years to convert traditional middle school into model middle school.
 - (b) There is no need to implement the model holistically, given the fact there is so many cultural and social differences.
2. The government should place teacher training as the first concern. Since Taiwanese teachers are not used to team work and integrated curriculum, the government should offer incentives to motivate teachers to participate in sessions held by professors of middle school curriculum and future studies.
3. Curriculum should be designed to meet students' individual needs. Instead of providing the same curriculum to students of different cognitive abilities,

the school should provide specific curriculum to meet special students.

Middle school teachers should be involved in policy level, design level, and delivery of curriculum. Curriculum should not be the business of professors alone.

4. Administrators need to adopt participative leadership instead of authoritarian leadership, thus encouraging teachers' involvement in school management.
5. Old schools are suggested to convert themselves into model middle schools step-by-step with as little resistance as possible, while new schools may be so constructed as to meet the needs of block scheduling and integrated curriculum. They are suggested to select teachers who are specifically trained in middle school teaching.
6. Some schools, especially small ones with big space, may be designated as experimental schools. The success of these schools will serve as an example to others.

Recommendation for Further Study

The following recommendations for study are worth consideration:

1. The study could be replicated by interviewing administrators, parents or community members in order to understand their attitudes toward Taiwanese middle school education.
2. A quantitative study using the same research questions may be administered for comparison.

3. Each of the five research questions may be regarded as a research title against which derived research questions may further be proposed.
4. More teachers may be interviewed to conduct a large-scale research (eg. nationwide or citywide).
5. Tape-recording may replace handwriting as a means of keeping track of the interviewees' responses, though handwriting proves to be more condensed and straight forward.

APPENDIX A
ETHNOGRAPHIC INTERVIEW PROTOCOL

Interviewee: _____

Name: _____

School: _____

Years of teaching: _____

City: _____

Date: _____

Signature: _____

Interviewer Name: _____

The purpose of this ethnographic interview is to understand the practical problems with Taiwanese middle school education on the one hand and the applicability of the American middle school on the other. We are deeply convinced that you, as a practitioner of middle school education, are most qualified to present precious viewpoints. Your answers will contribute considerably to the knowledge base of middle school education. Your answers will be gathered for analysis and your name will not be identified. We appreciate your cooperation.

Research Questions

1. Over the past years there have been a plethora of criticisms of the Taiwanese middle school education. Do you agree with the critics?
2. You surely are aware of the various problems identified by those critics. Do you, as a practitioner, identify the same problems with the educational system?
3. Since you are aware of the problems with the Taiwanese middle school education, what, according to you, needs to be changed in Taiwan's educational system?
4. The American middle school concept has been widely adopted in America to substitute for junior high school mode. Do you think American middle school concept will work in Taiwan? (See Attached Paper 1 for the ingredients of the American middle school concept.)
5. The American middle school curriculum, according to Lundt (1996) is basically futuristic-oriented. Do you believe it will meet the needs of Taiwanese students in the future? (See Attached Paper 2 for the characteristics of the middle school curriculum.)

Attached Paper 1

Over the past century, the emphasis on adolescent development and needs, the awareness of social impacts on adolescents, and the vision of the future have culminated in the framework of the essential middle school. The ingredients of the essential middle school may be identified as:

1. Purpose

Develop life-long learners and meet the needs of the emerging adolescents.

2. General Nature

Student-oriented

Flexible

Modular schedule

Team management

Teacher empowering

3. Curriculum

Horizontal articulation

Balanced curriculum

Interdisciplinary curriculum

Multi-age/ability grouping

Large and small group activities

4. Guidance Role

Teachers serve as adult role models

Advisor-advisee programs

Guidance counselors involved in instruction

5. Personal Development Program

Social skills development

Values clarification

Self-concept development

Sex education

Drug education

6. Reporting

Individualized grading

Judgmental grading

Competitive grading

Narrative grading

Parent-student-teacher conferences

7. Extra-Curricular Activities

Intramural activities

School performances in band and drama

Programs integrated into the school day

Attached Paper 2

The American middle school curriculum has the following characteristics:

1. Belief in the potential of humanity.
2. Forward-looking, dynamic, and use programmatic philosophies.
3. Willingness to explore the unknown.
4. Social diversity and global citizenship.
5. Collaborating to solve problems.
6. Focusing on a future-oriented skills curriculum.
7. Clear thinking, evaluation and analysis.
8. Understanding the environment.
9. Accessing information and solving for the unknown.
10. Personal competence through lifelong learning.
11. Seeing issues as interdisciplinary.

APPENDIX B

PILOT COVER LETTER AND CRITIQUE SHEET

Pilot Cover Letter

Dear Pilot Study Member:

You are cordially invited to participate in a pilot run of this survey. The final draft of this survey will be used in a study entitled, "An Investigation of Taiwanese Middle School Teacher's Attitudes Toward Taiwanese Middle School Education."

This study will investigate middle school teachers' attitudes toward five aspects of Taiwanese middle school education: (1) Do they agree with the critics? (2) Do they identify the same problems with the educational system? (3) What needs to be changed? (4) Will the American middle school concept work in Taiwan? and (5) Will the American middle school curriculum meet the needs of Taiwanese students in the future?

This study will involve 20 middle schools in each of the following cities: Taipei, Taichung, Taitung, and Changhua. One subject teacher will be selected from each school for ethnographic interview.

In order to help determine the length of time it takes for each respondent to complete the interview, and to help validate and clarify any confusing or ambiguous language possibly contained in the interview questions, a pilot survey is therefore needed. Your participation and help in this pilot study is important and will surely provide insight into unforeseen flaws in the survey.

You will not be identified individually in this study, as reporting of the interview results will be for analysis only. You may feel free to withdraw from the study at anytime. Your completed survey indicates the informed consent to include your results with the other pilot study members.

We, the researcher and the advisor, would first express our gratitude for your collaborating with us to contribute to academia. If you have any questions, please feel free to call me at (04) 7242310.

Sincerely yours,

Chou Chih-Cheng
Doctorate Candidate
Department of Educational
Leadership and Counseling
The University of Montana
Missoula, Montana, 59812
U.S.A.

Dr. John C. Lundt
Department of Educational
Leadership and Counseling
The University of Montana
Missoula, Montana 59812
U.S.A.

Critique Sheet: Pilot Interview

Please check the most correct response for each item and supply the requested information which follows each item. Your response will assist in producing the final form of the survey which will be used to collect information from 20 teachers in four cities.

(1) The time required to complete the interview was:

() less than 1 hour

() 1~1.5 hours

() 1.5~2 hours

() more than 2 hours

(2) When reading the interview questions, you found:

() all words were understandable.

() some words were unfamiliar, but did not affect my ability to answer.

() many words were unfamiliar and my ability to answer was adversely affected.

Note: Please circle any words or phrases that were unfamiliar or confusing.

(3) When reading the questions relevant to middle school education

() all were relevant to middle school education.

() some questions seemed to be irrelevant to middle school education.

() many questions were not concerned with middle school education.

Note: Please list the number of the questions which are regarded to be irrelevant to middle school education.

(4) When answering the interview questions, you found:

() most of them were answered without too much deliberation.

() some questions required much deliberation.

() many questions were difficult to answer.

Note: Please list the number of the questions you regard to be difficult to answer.

(5) When answering the interview questions, you found:

() scarcely any questions made you feel uncomfortable.

() some questions made you feel uneasy or uncomfortable.

() many questions made you feel uncomfortable or uneasy.

Note: Please list the number of the questions which made you feel uneasy or uncomfortable.

(6) Please list any item that you feel should be added to the survey.

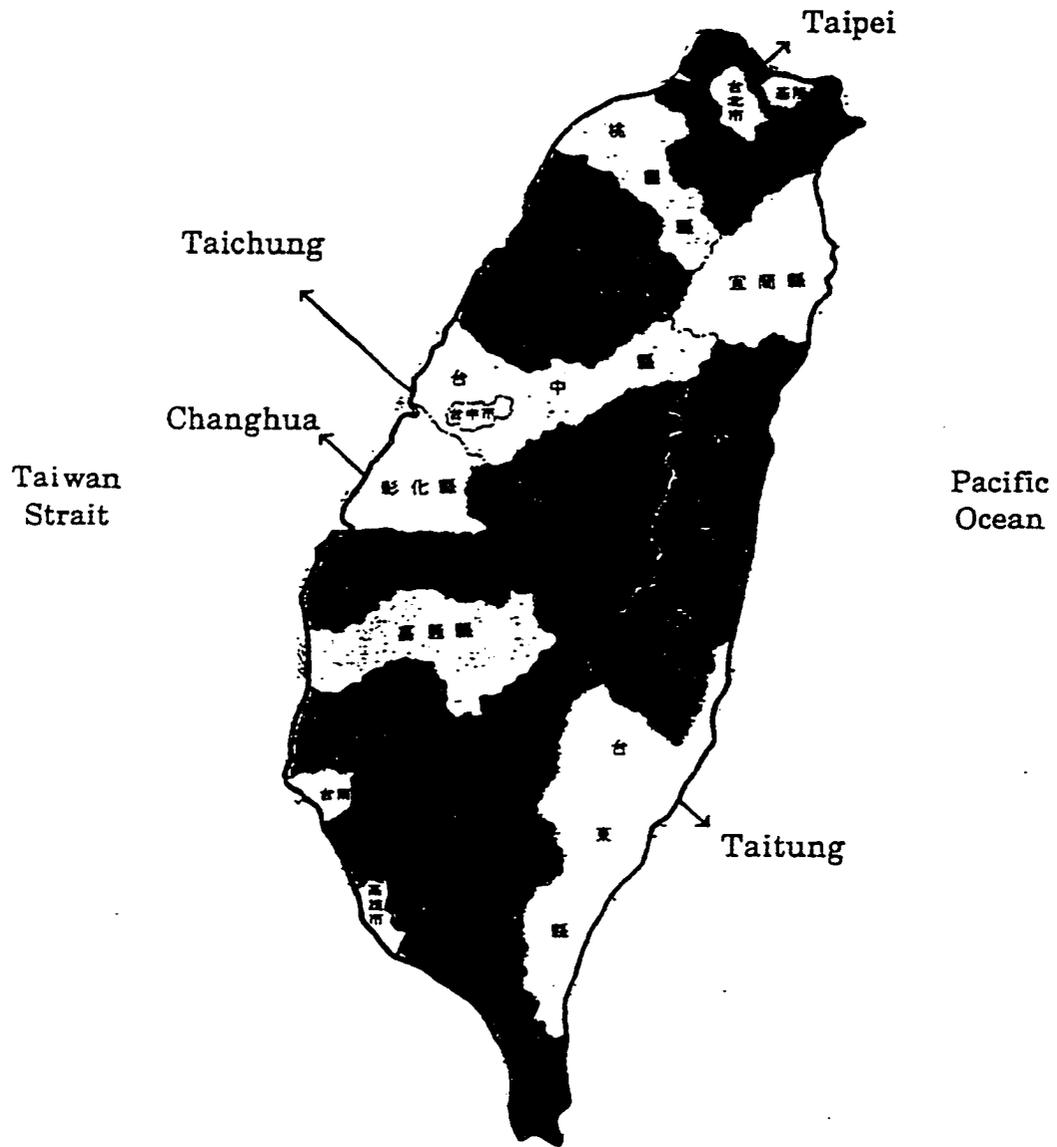
(7) Please make any further comments or suggestions.

Many thanks,

Chou Chih-Cheng

APPENDIX C

A MAP OF TAIWAN'S COUNTRIES



REFERENCES

- Ackoff, R. L. (1974). *Redesigning the Future: A Systems Approach to Societal Problems*. New York: Wiley.
- APA. (1994). *Publication Manual*. (4th ed.). Washington, D.C.: American Psychological Association.
- Bennis, W. (1966). *Changing Organization*: New York: McGraw-Hill.
- Bennis, W., Benne, K., & Chin, R. (1969). *The Planning of Change*. New York: Holt, Rinehart and Winston.
- Best, J., & Kahn, J. (1989). *Research in Education*. (6th ed.). Englewood, Cliffs, NJ: Prentice Hall.
- Bloom, B. ed. (1956). *Taxonomy of Educational Objectives: Handbook I*. New York: David McKay Co.
- Brandt, R. (1994). *Aiming for New Outcomes: The Promise and Reality*. In Educational Leadership. Vol. 5, pp. 6-10.
- Cawelti, G. (Mar, 1995). *High School Restructuring: What are the Critical Elements?* NASSP Bulletin. pp. 1-15.
- Carnegie Council on Adolescent Development. (1989). *Turning Points: Preparing American Youth for the 21st Century*. New York: Carnegie Foundation.
- Coates, J., & Jarratt, J. (1990). *What Futurists Believe*. (2nd ed.). Bethesda, MD: The World Future Society.
- Cuba, E. (1967). *The Role of Educational Research in Educational Change*. Bloomington, IN: National Institute for the Study of Educational Change.

- Cuban, L. (1990). Reforming again, again, and again. *Educational Researcher*, 19(1), 3-13.
- Drake, S. (1993). *Planning Integrated Curriculum: The Call to Adventure*. Alexandria, VA: ASCD.
- Educational Research Service Circular (1969). *Middle School in Action*. Washington, D.C.: American Association of School Administration.
- Eisner, E. (June, 1995). Standards for American Schools: Help or Hindrance. In Phi Delta Kappan. pp. 758-764.
- Fullan, M. G., & Miles, M. B. (1992). Getting Reform Right: What Works and What Doesn't. In Phi Delta Kappan. Vol. 73. pp. 745-752.
- Fullan, M. G., & Stiegelbauer, S. (1991). *The New Meaning of Educational Change*. New York: Teachers College Press.
- Garcia. (1991). *Teaching in a Pluralistic Society*. New York: Harper Collins.
- Gay, L. (1987). *Educational Research: Competencies for Analysis and Application*. (3rd ed.). Columbus, OH: Merrill.
- George, P., & Shewey, K. (1994). *New Evidence for the Middle School*. National Middle School Association.
- George, P. S., & Alexander, W. M. (1993). *The Exemplary Middle School*. New York: Harcourt Brace College Publishers.
- Glatthorn, A. (1990). *Supervisory Leadership: Introduction to Instructional Supervision*. Harper Collins Publisher.

- Griffith, D. E. (1947). Toward a Theory of Administration Behavior. In Administrative Behavior in Education. Ronald, C. & Russell, T.G. eds. New York: Harper and Row. p. 368.
- Hall, S. (1905). Adolescence. In The American Secondary School. Koos, L. ed. New York: Ginn and Company. pp. 71.
- Havighurst, R. (1972). Developmental Tasks and Education. New York: David McKay.
- Hernstein, R., & Murray, C. (1994). Bell Curve: Intelligence and Class Structure in American Life. New York: The Free Press.
- Horenstein, M. (1993). Twelve Schools That Succeed. Bloomington, IA: Phi Delta Kappan.
- Hoyle, J. R. (Nov, 1992). Ten Commandments for Successful Site-based Management. In NASSP Bulletin. pp. 81-87.
- Hunter, M. (1984). Knowing, Teaching and Supervising. In Using What We Know about Education. P. L. Hosford ed. Alexandria, VA: ASCD. pp. 169-192.
- Joyce, B., Wolf, J., & Calhoun, E. (1993). The Self-Renewing School. Alexandria, VA: Association for Supervision and Curriculum Development.
- Klein, D. (1967). Some Notes on the Dynamics of Resistance to Change. In Concepts for Social Change. Watson, D. ed. Washington, D.C.: Cooperative Project for Educational Development, National Training Laboratories.
- Koos, L. (1927). The American Secondary School. New York: Ginn and Company.
- Krathwohl, D., et al. (1964). Taxonomy of Educational Objectives: Handbook I. New York: David McKay Co.

- Lange, J. T. (Jan, 1993). Site-Based, Shared Decision Making: A Resource for Restructuring. In NAASP Bulletin. pp. 98-107.
- Longstreet, W., & Shane. H. (1993). Curriculum for a New Millennium. Needham Heights, MA: Allyn & Bacon.
- Lounsbury, J. H. (1992). Perspective on the Middle School Movement. In Transforming Middle Level Education: Perspectives and Possibilities. Allyn & Bacon Publisher.
- Lundt, J. C. (Nov, 1993). Window with a View: Holding Middle School Hostage. In Schools in the Middle. pp. 54-56.
- Lundt, J., & Pulliam, J. (1993). A Futurist's View of Curriculum and Instructors. Unpublished paper of The University of Montana.
- Lundt, J., & Vanderpan, T. (Nov, 1995). Merging Site-Based Management with Middle School Development. In Middle School Journal. pp. 12-16.
- Lundt, J. (May, 1996). Curriculum for the Future: A Futuristic Look at Middle School. In Middle School Journal. pp. 29-34.
- Manno, B. (May, 1995). The New School Wars: Battles Over Outcome-Based Education. In Phi Delta Kappan. pp. 720-726.
- McMillan, J., & Schumacher, S. (1989). Research in Education: A Conceptual Analysis. Glenview, IL: Scott Foreman & Co.
- NASSP. (1996). Breaking Ranks: Changing an American Institution. Reston, VA: NASSP.
- _____. (Feb, 1996). Site-Based Management in Secondary School. In Practitioner. Vol. 22 No. 3. Reston, VA: NASSP.

- National Middle School Association & National Association of Secondary School Principals. (1995). *Middle School Teachers: Portraits of Excellence*.
- NSSE. (1971). *The Curriculum: Retrospect and Prospect*. p. 5.
- Ozman, H., & Craver, S. (1992). *Philosophical Foundations of Education*. New Jersey: Prentice Hall, Inc.
- Patten, M. (1990). *Qualitative Evaluation and Research Methods*. (2nd ed.). Newbury Park, CA: Sage Publication, Inc.
- Perreault, G., & Issacson, N. (May/June, 1996). *Learning from Schools with Restructured Schedules*. In *The Clearing House*. 69(5). pp. 265-267.
- Pulliam, J., & Patten J. (1995). *History of Education in America*. (6th ed.) Englewood Cliffs, NJ: Prentice Hall, Inc.
- Senge, P. (Fall, 1990). *The Leader's New Work: Building Learning Organizations*. *Sloan Management Review*. pp. 7-21.
- Street, S. J. (1994). *Implementation of Planned Change: The South Dakota Modernization Process*. Unpublished Doctoral Dissertation. The University of South Dakota, Vermillion.
- Webb, R., & Sherman, R. (1988). *Schooling and Education*. (2nd ed.). New York: McMillan Publishing Co.
- Webster, W. (1994). *Voices in the Hall: High School Principals at Work*. Bloomington, IA: Phi Delta Kappan.
- Wiggins, G. (Feb, 1991). *Standards, Not Standardization: Evoking Quality Student Work*. In *Educational Leadership*. Vol. 48. pp. 18-25.

- Wiles, J., & Bondi, J. (1993). *The Essential Middle School*. New York: McMillan Publishing Co.
- Wittmer, J. (1993). *Managing Your School Counseling Program: K-12 Developmental Strategies*. Minneapolis, MN: Educational Media Corporation.
- Working Group on the Emerging Adolescent Learner. (1975). *The Middle School We Need*. Washington, D.C.: Association for Supervision and Curriculum Development.
- 王文科(1990). *教育研究法*。台北：五南。
- 王文科(1994). *質的教育研究法*。台北：師大書苑。
- 王家通，吳裕益(1986). *國中優良教師之特質及其背景研究*。教育資料文摘，98期 .PP.83-130。
- 王家通等著(1997). *中等教育*。台北：麗文。
- 王鳳階(1965). *中國教育史*.9版.台北：正中書局。
- 王震武，林文瑛(Sep, 1995). *鬆綁原則的整合與政策建議*。教改通訊 12期 p.23。
- 王震武等著(Sep,1995). *台灣教育組織的體質—以國民教育為中心的分析*。教改通訊,12期 p.22。
- 王慧婉(Jan, 1997). *基層教師看教改會報告書—建立以教師和學生為主題的改革運動*。教育研究資訊 5卷一期 pp.19-24。
- 王鐘和(Nov,1997). *我國中小學之性教育*。教育資料與研究，Vol.76 pp.2-13。
- 田培林(1997). *教育史*。台北：正中。
- 牟中原(Nov,1995). *中小學校之經營*。教改通訊，14期 pp.16-19。
- 李遠哲(Apr, 1995). *給教師的一封信*。教改通訊，7期 p.12。
- 汪知亭(1963). *台灣教育史再版*。台北：台灣書局。

- 林文瑛 (May,1996). 日本教育改革經驗的啓示。教改通訊，20 期 pp.6-8。
- 林新發 (1994). 調查研究法，黃光雄等主編教育研究法。台北：師大書苑，pp.255-280。
- 周麗玉 (Feb,1995). 國民教育中的弱勢。教改通訊，5 期 p.11。
- 周麗玉 (Sep,1995). 學生行爲適應與輔導。教改通訊，12 期 pp.2-4。
- 周祝瑛，陳委任 (Sep,1995). 國中日常教學活動之生態研究。教改通訊，12 期 p.29。
- 周恩文 (1988). 歷史研究，賈毓茗、楊深坑主編，教育研究法的探討與應用。台北：師大書苑。
- 吳春山 (1994). 美國教育組織與行政。台北：五南。
- 吳春山 (Nov,1997). 建立教師專業權威的探索—談專業知能，專業自主與專業倫理。教育資料與研究，Vol.19 pp.33-42。
- 林柳漳 (July,1992). 治療國中教育沉疴一、二帖試藥。教育通訊 22 期。
- 林嵩德 (1996). 國中生心理學。台北：五南。
- 金淑伊 (May,1996). 韓國教育改革概況。教改通訊，20 期 pp.4-5。
- 吳思達 (Oct,1997). 新頒國民中學課程標準之社會學分析。中等教育 No.5 48 卷 pp.81-84。
- 胡美琦 (1990). 中國教育史。台北：三民書局。
- 馬凱 (May,1996). 評論“德國教育的理念與制度—以分流教育爲例。教改通訊 20 期 pp.19-20。
- 馬哲儒 (Dec,1996). 讓全國都是文教優先區。教改通訊 27 期 pp.26-27。
- 馬傳鎮 (1991). 國中教育的功與過：論青少年犯罪問題。政大：青少年犯罪與教育研討會。
- 徐宗林、周恩文 (1997). 教育史。台北：五南。
- 教改會 (May,1996). 教改通訊 20 期。
- 教改會 (Nov,1996). 第二期諮議報告書。台北 pp.28。

- 教育部(1994). 國民中學課程標準總綱。
- 徐澄清 (Nov,1997). 中日美小學生學業成就之跨文化研究。中時晚報 11 月 26 日。
- 孫仲山、李碧娟 (May,1997). 國民中學教育情境中師生語言行為分析。教育研究資訊 5 卷 4 期 pp.89-100。
- 郭生玉 (1981). 心理與教育研究法。台北：大世紀。
- 陳麗欣 (1993). 國民中學學生被害恐懼感之研究。台北：五南。
- 陳麗欣 (Jan,1997). 從校園暴行之迷思誤校園危機。教育資料與研究。Vol.14 p.29。
- 陳若璋 (May,1997). 校園性暴力防治之討論題綱。教育資料與研究，16 期 pp.31-33。
- 黃昆輝等著 (1997). 教育與文化。台北：五南。
- 張芳全 (1907). 教育問題與教育改革：理論與實際。台北：商鼎。
- 馮友蘭 (1930). 中國哲學史，台北。
- 張德銳 (May,1996). 美國教育改革。教改通訊 20 期, pp.13-17。
- 張德聰 (Jan,1997). 從青少年次文化談校園危機處理。教育資料與研究，Vol.14, pp.37-52。
- 詹智慧 (Jan,1996). 校長考核與甄選同時改進。教師人權 73 期, pp.19-20。
- 鄔佩麗 (July,1996). 校園暴力研究報告。教改通訊 21 期，pp.40-41。
- 蔡保田 (1987). 調查研究法在教育上的應用，中國教育學會主編，教育研究方法論。台北：師大書苑。
- 臺灣省教育廳 (1995). 教育通訊。
- 臺灣省教育廳 (1996). 教育通訊。
- 臺灣省教育廳 (Nov,1997). 教育通訊。
- 福爾摩沙文教基金會 (Apr,1997). 台北市國中生活日誌調查。聯合晚報 4 月 27 日。

謝文全(1996). 中等教育—理論與實際。

簡正鑑(Sep,1997). 青少年發展任務及其相關因素之研究，教育研究資訊 5 卷 5 期， pp.84-98。

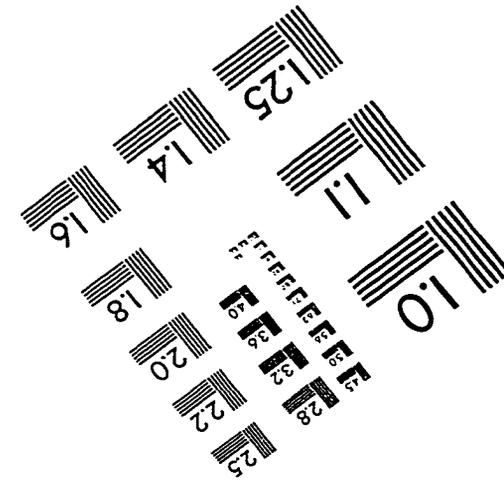
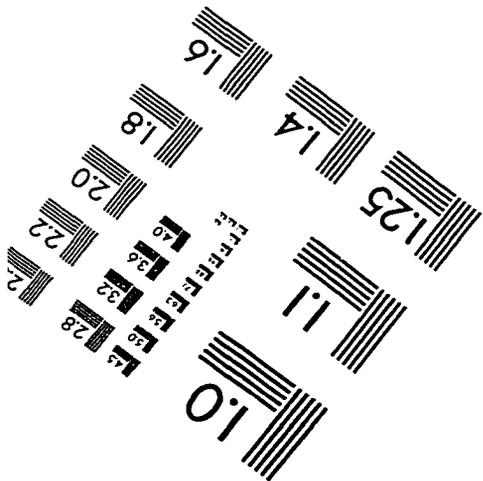
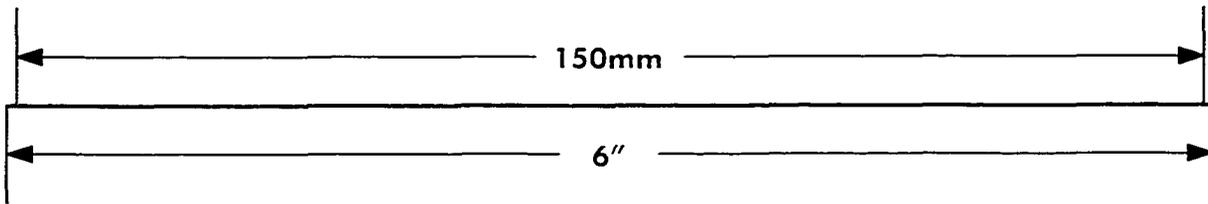
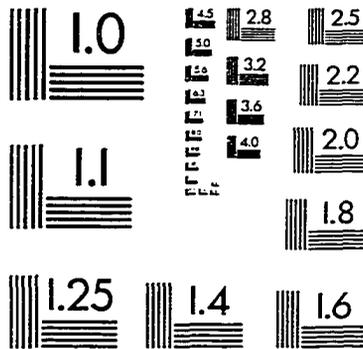
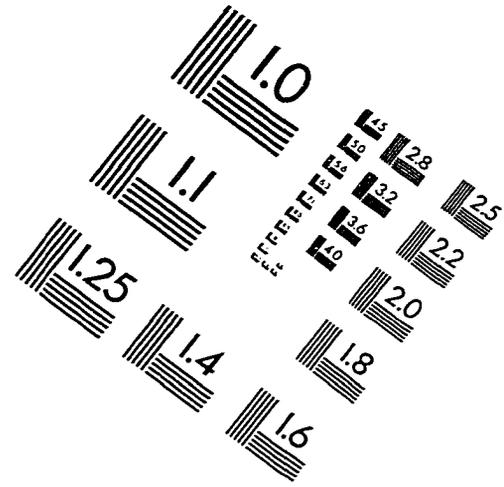
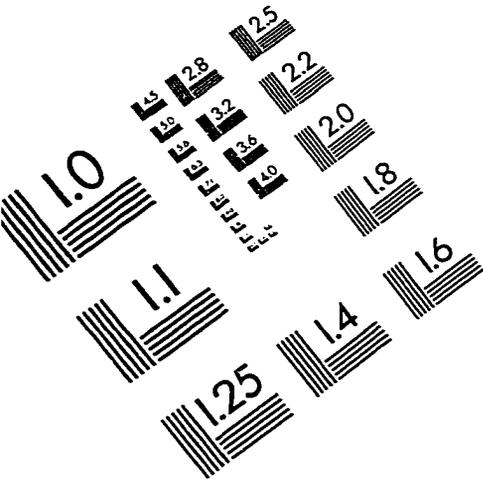
簡茂發等著(May,1997). 中小學教師應具備的基本素質。教育研究資訊 5 卷三期 pp.1-14。

謝臥龍(May,1997). 優良國中教師特質之德懷分析。教育研究資訊 5 卷 3 期 pp.14-27。

顏國樑(Oct,1997). 影響執行國民中學常態編班的因素及其因應策略。中等教育：48 卷 5 期 pp.3-11。

顧忠華(May,1996). 德國教育改革的理念與制度。教改通訊 20 期, PP.18-19

IMAGE EVALUATION TEST TARGET (QA-3)



APPLIED IMAGE, Inc
1653 East Main Street
Rochester, NY 14609 USA
Phone: 716/482-0300
Fax: 716/288-5989

© 1993, Applied Image, Inc., All Rights Reserved