

## ABSTRACT

Title of Dissertation:                   TEACHING TAIWANESE INDIGENOUS  
STUDENTS: CASE STUDIES OF THREE  
HAN CHINESE TEACHERS

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Research clearly indicates that Indigenous students continue to fail in the Taiwan public school system. One way to address this problem is to improve classroom instruction. This study examines the beliefs, knowledge, and practices of three Han Chinese female teachers, in three different settings, who were considered exemplary teachers of Indigenous students by the superintendent, teacher educators, principals, or administrators. It also explores related personal and contextual factors in order to better understand how teaching expertise was developed and was supported or impeded. Using qualitative research methods, I collected data via classroom observations, semi-structured interviews, and analysis of pertinent documentation. The data were examined, using a conceptual analysis model comprising two perspectives: culturally relevant teaching and critical pedagogy.

The data analysis identified five themes in the teachers' beliefs, knowledge, and practices of teaching Indigenous students: (a) self-confidence and commitment, (b) differentiated expectations, (c) cultural pedagogy, (d) character development, and (e) an ethic of care. The findings also showed that the three teachers relied on their own experiences, their memorable teachers' styles, and their accumulated teaching experiences to develop their teaching expertise. Moreover, findings demonstrated that the teachers' work was constrained by time limitations for teaching and by a conservative school culture that devalued instructional innovation. On the other hand, teaching was supported by a collaborative school culture and by a school policy that valued Indigenous cultural development.

Based on the research findings, this study suggests that teacher educators and school administrators provide a venue for teachers to discover their hidden beliefs about Indigenous culture and about their teaching practices; provide the theoretical and practical knowledge and skills needed by Indigenous students; and create school environments that support personal and professional improvements that will improve the teaching of Indigenous students. Moreover, this study suggests that teacher educators and school administrators consider cultural contexts when preparing teachers to teach Indigenous students. Culturally relevant teaching might well be suitable for educators who work in the Indigenous areas. Critical pedagogy, in turn, might well meet the needs of teachers who work with diverse populations of students in large urban schools.

TEACHING TAIWANESE INDIGENOUS STUDENTS: CASE STUDIES OF  
THREE HAN CHINESE TEACHERS

by

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# CHAPTER 1

## INTRODUCTION

All children have the right and the capacity to learn. The purpose of education should be to create equal opportunities for all students to attain their fullest potential (Bennett, 2001; Darling- Hammond, 1997). That goal requires that the classroom be the place where each student, regardless of cultural background, can take advantage of the benefits of instructional expertise and can pursue academic achievement. However, teaching in many schools still holds little chance of producing satisfactory learning, especially for marginalized students. Academically, those students not only lag behind their counterparts, they also suffer discrimination and labeling because of their physical appearance or cultural background (Chiu, 1997; Deyhle, 1995; Hilliard, 1992; Katz, 1999; Tang, 1997; Yang, 2003). The academic failure of minority students testifies that teachers are failing to achieve the goal of educating all students. That failure has sharply focused on the urgent need for teachers with the knowledge and skills to work effectively with diverse student populations (Banks, 1991; Chen, 1999; Cochran-Smith, 1995; Hsiao, 2001; Zeichner & Hoelt, 1996).

This study examines the experiences of three exemplary Taiwanese elementary school teachers who teach Indigenous students. The purpose of this study is to obtain insights about teaching Indigenous students, as well as to look at how the work of those teachers is influenced and supported in their school settings. That analysis is intended to help teacher educators and school administrators direct the changes necessary to improve teachers' practices to achieve cultural diversity.

## Statement of the Problem

To better understand the educational contexts for Indigenous school children in Taiwan, this section first describes the population and considers the complex interactions of personal, social, and educational factors influencing the formal education of Indigenous students. Next, this section summarizes research in Taiwan regarding teachers' beliefs, knowledge, and practices; examines how this research relates to teaching Indigenous students; and then explains the need for this study.

### *The Education of Indigenous Students in Taiwan*

Taiwan's population is 23 million. The majority of Taiwan's population is Han Chinese, which can be broadly classified into three ethnic groups: two groups of Taiwanese Chinese<sup>1</sup>—Hoklo and Hakka—and Mainland Chinese<sup>2</sup>. The Indigenous population is 440,000, making up about two per cent of the total population in Taiwan. They are divided into eleven tribes: Ami, Atayal, Bunun, Kavalan, Paiwan, Puyuma, Rukai, Saisiat, Thao, Tsou, and Yami. Most Indigenous people live in the counties of Taitung, Hwalian, Taipei, and Kaoshiung (Department of Statistics, 2004).

There is striking evidence of the relative deprivation of the Indigenous Taiwanese. Most Indigenes live in the mountainous areas and eastern Taiwan, where resources and work opportunities are limited. Therefore, many Indigenes migrate to cities for better employment opportunities. Unfortunately, most of them are not well

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<sup>1</sup> Early Chinese migrants to Taiwan arrived mainly from Fukien and Kwangtung (Canton) provinces. The Fukien Taiwanese came mostly from the southern part of Fukien province. Hakka Taiwanese came from Canton province.

<sup>2</sup> In 1949, the Communists defeated Nationalist Chinese armies on the Mainland and assumed political control of China, and 1.5 million Chinese immigrants reached Taiwan. Because they came from various parts of China, they were known simply as Mainlanders.

educated and generally lack the specialized skills needed for the better jobs. They are usually recruited into unskilled, dangerous, physically demanding, and low-pay occupations (Cho, 2002). Moreover, Indigenes suffer an unemployment rate two to three times greater than the national average (see Table 1.1). In 2002, as shown in the table, the ratio of unemployment rates of Indigenes and all Taiwanese (1.67) was lower than other years because, at that time, the government encouraged the employment of Indigenous people. However, another study that year showed that 49.7% of Indigenous people, including temporary employees, had a monthly income of less than 10,000NT (approximately \$300US), compared to 30,000NT (approximately \$1,000US) for all Taiwanese (Lu, 2003). Those data suggest that few Indigenes are able to climb the socio-economic ladder and participate in urban life (Chen, Huan, & Chiu, 2003). That information also illustrates that race is interwoven with poverty, as most Indigenous students come from disadvantaged backgrounds.

Table 1.1 Comparison of the Unemployment Rate of Indigenes and all Taiwanese

Date	Indigenes	All Taiwanese	Ratio
Dec. 1996	5.66%	2.60%	2.18
Mar. 1999	7.55%	2.84%	2.66
Mar. 2001	9.24%	3.89%	2.38
Sep. 2001	14.86%	5.26%	2.83
May 2002	8.37%	5.02%	1.67

Source: *Promotion of employment for the Indigenous people in Taiwan: A multiple tribe-centered and socioeconomic development*, p. 1, by C. C. Lu, 2003, Paper presented at the International Conference on Indigenous Peoples' Rights. Soochow University, Taipei, Taiwan.

Although the express goal of education in Taiwan is to provide equal opportunities for all students, regardless of cultural background, to reach their fullest potential (Taiwan Ministry of Education, 2006a), the design of the national curriculum still does not recognize Indigenous students in the context of their own cultures. Educational discourse is still heavily laden with assimilation overtones, which suggests that one of the unspoken aims of education is to absorb culturally diverse students into mainstream Taiwan society (Feng, 1996). The ideology of assimilation has disadvantages for both Han Chinese students and Indigenous students. Learning only their own culture and values, Han Chinese students are ignorant of the rich heritage and natural beauties of Indigenous culture, so they are unable to appreciate, and disinclined to tolerate other cultures' values and lifestyles. Students' perceptions of themselves and their world are inherent to their culture. Indigenous students cannot develop high self-esteem and perform to their potential when their cultural values and heritage are not recognized, honored, and respected (Xie, 1987).

This cultural disconnect between Indigenous students and their schools adds to difficulties in learning and militates against educational success (Chung, 2003; Lin, 2003). Indigenous students need teachers to help them succeed at higher levels of learning. However, most teachers in Taiwan are predominantly middle-class Han Chinese females who are not prepared to teach students whose culture differs from their own (Chen, 1998; Chung, 2003; Hsiao, 2001). Their instructional activities and materials are rarely in the context of their cultural backgrounds (Chen, 1998; Chen, 1999). In short, Taiwanese teachers lack the knowledge, skills, and experience needed



to educate its Indigenous children. Without academic support based on their cultural background, Indigenous students lack the desire and motivation to learn (Chung, 2003; Lin, 2003).

When educators are insensitive to the needs of students from different cultures, they are often unaware of cultural conflicts that create barriers in the learning process (Larke, 1990). For example, teachers who do not understand characteristic achievement and discipline problems of students from culturally and socio-economically diverse backgrounds are more likely to misinterpret the students' communication styles, both verbal and non-verbal, that lead to misdiagnosing educational problems and mistreating poor students and minority students (Hillard, 1983; Irvine, 1989; Katz, 1999; Rist, 1970; Schofield, 1986). Taiwanese studies support those findings. Research shows that teachers approach academic or behavior problems of Indigenous students on an individual basis, rather than considering the students' cultural backgrounds and learning styles. For example, Chung (2003) found that the teacher in her study did not view cultural differences as important factors that influence the learning of Indigenous students. The teacher drilled her Indigenous students on the content to be learned, rather than reflecting on the problems of her own teaching or considering changes in her practices to meet Indigenous students' learning needs. Other researchers discovered that Indigenous students were often perceived by teachers as unruly and naughty. Consequently, teachers disciplined them more, without considering the students' cultural dispositions or learning styles (Chung, 2003; Lee, 2003; Wu, 2000).

Researchers have also found that some teachers enter classrooms with biases about the intellectual potential and learning ability of Indigenous students (Chen, Chung, Lai, & Wang, 1997; Chou, 2005; Chung, 2003; Lee, 2003). Those studies show that many non-Indigenous teachers perpetuate stereotypes about Indigenous students, seeing them as lazy, less intelligent than their mainstream counterparts, and having parents who are relatively uninvolved in their children's education. When teachers conclude that parents and students should take responsibility for school failures, they are more likely to hold lower expectations for Indigenous students. They often feel powerless to teach Indigenous students and fail to accommodate their instruction to meet Indigenous' needs (Chung, 2003; Lee, 2003). Moreover, many teachers feel uncomfortable with some Indigenous behavior, have a negative impression of surrounding tribal communities, and avoid having contact with parents or involvement in the Indigenous community (Chung, 2003; Chyuan, 2000). With such prejudices, it is unlikely that teachers could establish productive relationships with Indigenous students or, much less, with Indigenous parents.

Faced, at every turn in the educational process, with challenges to their personal, social, and learning lifestyles, Indigenous students experience major learning difficulties and adaptation problems. Evidence of that was found in numerous reports showing the achievement gap between mainstream and Indigenous students. For example, educational research has consistently shown that the academic performance of Indigenous students in Taiwan is, on average much lower than that of Han Chinese students (Liu, Wu, & Chen, 1995; Wang, 1998; Yang, 2003). The dropout and suspension rates of Indigenous students are much higher than those of

students overall (Department of Statistics, 2004). Moreover, studies have found that Indigenous students experience discrimination and bias from teachers and classmates, as well as feelings of shame and inferiority (Chiu, 1997; Tang, 1997; Yang, 2003). Some students who are not easy to identify as Indigenous because of their lighter skin, for example, hide their racial identification by behaving and speaking like Han classmates, in order to assimilate more fully into school life (Chiu, 1997; Chou, 2005; Lai, 1996).

As a group, Indigenous students are the least empowered and poorest students in Taiwan. They struggle with the crises of poverty, discrimination, identity conflict, low achievement, high drop-out rates, exclusion, disparagement, and teachers' lack of training for and understanding of the Indigenous culture. Those problems impose radically different educational, social, and psychological demands on minority students. A solution to the continuing learning problems of Indigenes might be to improve classroom instruction. Instructional changes would require teachers to be cognizant of the differences between the experiences of themselves and their students, to be knowledgeable about how to teach students whose cultural background differs from their own, and to be equipped with the skills to teach culturally diverse students. This study aims to identify effective practices and to introduce innovative methods in teaching Indigenous students.

### *Research on Culturally Diverse Teaching*

Identifying successful, culturally diverse teaching can pave the way for educators to consider alternative ways of thinking about, evaluating, and accommodating teaching and learning for students in a culturally diverse

environment. Researchers in culturally diverse countries, such as Australia, Canada, and the United States, have explored exemplary teaching (see Foster, 1995; Ladson-Billings, 1994; Levine, 1988; Macdonald, 1995; Mayer, 1994; McDermott & Rothenberg, 1999; Olsen & Mullen, 1990; Owles, 2001; Seldin, 1999). Significant findings from those studies show that some teachers—deemed as successful or exemplary by their administrators, colleagues, or students’ parents—believed that all students can learn, regardless of their background, and held the belief that they could make a difference working with culturally diverse children. Those teachers also expressed a thorough knowledge of their students’ cultures and experiences. The teachers’ beliefs and knowledge stemmed from patterns of practice that had proven effective with culturally diverse students. Effective teachers had created caring relationships with their students, had structured a supportive learning environment, had encouraged students to learn collaboratively and to respect cultural diversity, and had integrated student culture and knowledge with academic content. Those results revealed the personal and professional beliefs, knowledge, and skills needed in successful encounters with different cultures. The findings also provided a framework for understanding the characteristics needing to be present for successful teaching in a culturally diverse classroom.

It is important to be aware that research on culturally diverse teaching in one country cannot be assumed to be valid in the context of a different culture. Exploring exemplary teaching in Taiwan is necessary in order to understand Taiwanese teachers’ professional needs. However, little research on teacher beliefs, knowledge, and practices in Taiwan has focused on the exemplary teaching of Indigenous

children. Most of the research on teachers' beliefs has employed a quantitative methodology to understand instructional behavior and effectiveness (Chen, 1994; Feng, 2002; Huang, 1995; Liu, 1999; Sun, 2004; Tang, 1993; Wang, 2003; Yen, 1995) and beliefs about Indigenous students (Chen et al., 1997). Those studies provided general information about elementary teachers' beliefs and related factors. However, researchers studied the beliefs out of context, failing to bring out the dynamic, situational nature of the beliefs. On-site observations and interviews can help researchers better understand the nature of teacher beliefs, how those beliefs are manifested in practice, and the influence of personal and other variables on teachers' beliefs and practices.

A number of researchers have used qualitative research to explore the beliefs of teachers in Taiwan (see Fang, 2003; Hsiung, 2004; Jou, 1998; Lee, 2004; Liu, 2001; Wang, 2000; Weng, 2002; Wu, 2002) and teachers' practical knowledge (see Change, 2000; Hsieh, 2001; Lien, 2001; Shih, 2004; Wang, 2003). Their findings showed that what teachers believed and knew about the classroom social and instructional context influenced what they said and did in their classrooms. The research also illuminated more clearly the complex relationship between teachers' beliefs or knowledge and their practices. However, the studies focused on Han Chinese teachers of single subjects to Han Chinese students. None of the studies provided detailed descriptions of teachers' beliefs, knowledge, and practices for teaching Indigenous students across different subjects, such as Mandarin and mathematics. Nor did the studies occur in the context of a culturally diverse classroom, an environment quite distinctly out of the mainstream. Therefore, teachers' beliefs about and interpretations of their

experiences of teaching socially and culturally diverse students across different subject areas and cultural contexts remained unclear.

A few researchers have studied Taiwanese teachers' beliefs or knowledge and its relationship with teaching Indigenous students (e.g., Chou, 2005; Chung, 2003; Lee, 2003; Lin, 2003; Liu, 2004; Wu, 2000). The research revealed that teachers who were more aware of the differences between Han and Indigenous students tended to take action, such as caring for students, sharing experiences, incorporating resources from the student's family and community into the curriculum, and providing multiple instructional activities and materials to accommodate diverse students' learning styles. Those instructional practices motivated Indigenous students to learn and to better comprehend their cultures. Nonetheless, the studies were based on studies of single cases of a teacher and her Indigenous students (e.g., Lin, 2003; Wu, 2000), of teachers in one school (e.g., Chung, 2003; Lee, 2003; Liu, 2004), and of teachers of urban Indigenous students (Chou, 2005). The researchers did not study and report on exemplary teachers' practices, nor did they conduct research across different cultural contexts. Without the insight of research into exemplary teachers in different cultural contexts, we have only limited knowledge of the development of teacher expertise. We know little about the knowledge and skills of those Indigenous-student teachers of other subjects at a specific grade level. Neither do we know about the different school contexts that affect the teaching of Indigenous students. Thus, a systematic corpus of theoretical and practical knowledge regarding teaching Indigenous students has yet to be generated in Taiwan. Teacher education and staff development programs

do not offer specific guidance for preservice or in-service teachers in order to improve teaching and learning by culturally diverse students.

A review of the relevant literature on teaching in Taiwan reveals a scarcity of well documented research on teachers' beliefs, knowledge, and effective practices for Indigenous students in a variety of cultural contexts. The shortage of research shows that the issue has not been of wide concern or gained much attention from scholars. This study seeks to address that deficiency, beginning with effective teaching for Indigenous students. It is based on the belief that the poorest and most powerless Indigenous students need the highest-quality teachers to attain high achievement and self-esteem. This study explores what exemplary teachers believe about teaching Indigenous students and what knowledge, skills, and strategies they use to advance Indigenous students' learning and development. Moreover, this study explores personal and contextual factors that influence exemplary teachers' teaching of culturally diverse students—factors such as their early experiences and their teacher preparation, as well as the school settings that have influenced their teaching. This research, which conceptualizes exemplary teachers' beliefs, knowledge, and practices, and taps into influencing factors, not only expands the theory of culturally diverse teaching in Taiwan, but also provides practical information for teachers, teacher educators, and school administrators to develop or facilitate effective pedagogy that helps all students succeed.

#### Rationale

Morse (1994) claimed, “Often, one reason a topic is selected is that the researcher has had personal or professional experiences related to the subject and has

residual personal unmet needs or strong feelings stemming from these experiences” (p. 221). Accordingly, this section reports the author’s experiences as an elementary teacher of Indigenous students—the birthplace of her need to undertake this educational research.

I was a Han Chinese teacher, having graduated from a prestigious teachers college in Taiwan in 1996. The college focused on performance-based teacher training, which involved student teachers acquiring basic teaching knowledge and skills through a four-year academic program and a one-year internship. Unfortunately, the college did not have a program to address the educational needs of a culturally diverse school population. Moreover, the college did nothing to develop teachers’ critical awareness of the issues of inequity, marginalization, discrimination, and oppression, which were regularly experienced by students whose culture, income, language, or learning abilities differed from those of the dominant population.

Without any formal preparation and with little teaching experience with Indigenous children, my notions of how to teach them came from my own values and perspectives. For example, given their low level of achievement, I held negative opinions about and harbored low expectations for Indigenous students. I was culturally ignorant and was convinced that the students’ lack of achievement was caused by innate inabilities. I also believed that Indigenous students’ parents did not value the education of their children and were incapable of contributing to the education of their children. I never critically examined my attitudes, prejudices, and values toward people from different racial groups or wondered if those factors affected my teaching and interactions with students and parents. Neither was I



sensitive to the diversity of students' cultural backgrounds. As a result, my teaching did not consider the learning styles of Indigenous students or connect the content of a course with their background, which might have motivated them to learn and to achieve more.

Not only did I fail to cope with my stereotyping and prejudice toward Indigenous or to be aware of the problematic state of my teaching, but I was actually not cognizant of the power and privilege of the dominant culture in our society. I never questioned whether and how I transmitted dominant values that reinforced the position of the dominant group and ignored the oppressed group. Freire (1970) believed that the dominant group's imposition of curricula, ideas, and values was a type of violence. In my country, the violence deprecated the culture of the minority and also their racial identity. Looking back into my career, I can find an example. Sue, an Indigenous student in my classroom, did not acknowledge her racial identity. Once, as we were discussing the Indigenous tribes in Taiwan, another child shouted out, "Sue is an Indigenous." Most of the students shouted their disbelief, saying, "How come? Sue is a good student. Sue could not possibly be an Indigenous." I explained that no race was basically different and that none deserved privileges, and that each human being and every race should be respected. However, deep in my heart and conscience, I felt guilty because what I said was not what I felt or believed, nor was it how I treated Indigenous people. After class, Sue told me that she felt ashamed to be recognized as an Indigene. The incident led me to consider the implicit problem in our schools and our society. What kind of society and educational system persecutes its Indigenous? Does that mean that our education is a success or a failure?

On one hand, we attain cultural, social, and political domination; on the other hand, we fail to appreciate cultural diversity and democratic values. Unfortunately, as a fledgling teacher, I did not have the knowledge and ability to deal with the situation. As a result, I lost the opportunity to teach my students to confront and reduce prejudiced behavior against other cultures, to develop more positive cross-cultural relationships, and to learn about and to appreciate other cultures.

The experience, however, was not all negative. My reflection and re-evaluation left me in a panic, but the intense feelings played an important part in leading me to understand the problems of our teacher-education system and its inadequacies in meeting the needs of teachers in their everyday interactions with culturally diverse students. Without preparation for teaching the culturally diverse, teachers lack the necessary awareness, as well as the expertise and willingness to teach students whose cultural backgrounds differ from their own. Teachers' biases and prejudices against Indigenous students typically lead to lower expectations, and they can harm interactions with students and parents. As a result, Indigenous students are ignored or excluded from opportunities in school, and their chances for academic and personal success are severely limited. Some teachers unconsciously express their prejudices and perpetuate inadequate teaching. Presumably, most are sincerely concerned about their students and want to provide the best possible education for them. However, they lack a well-articulated framework for understanding class, cultural, and ideological dimensions that comprise classroom life and are frequently not even aware enough of these problems to state and question them.

Those are the personal underpinnings for this study. They are based on my personal experiences as a Taiwanese elementary teacher who was not aware that her teaching might be harmful to the Indigenous students in her charge and did not know how to develop effective teaching methods to meet their learning needs. Thus, I believe that it is important to document successful experiences of culturally diverse teaching to empower teachers to take action to effect positive change in their approach to culturally diverse students.

In summary, my educational experiences led me to recognize an inability of teachers to deal effectively with cultural diversity. Searching for solutions, I decided to embark upon an educational journey, to explore exemplary teachers' experiences and to document and disseminate examples of excellence and models for emulation. I was inspired by those who sought out the poor, lower-achieving Indigenous students. Much of their work goes unrecognized and remains only partly understood, with the result that their positive influence and successes have been insufficiently recognized and rewarded. This research aims to understand how excellent teachers acquire and use the necessary beliefs and knowledge, effective and alternative classroom skills to meet the needs of Indigenous students, and the traits to deal with various factors that affect their teaching. This study will be successful if it helps prepare preservice and in-service teachers to recognize and more effectively deal with cultural diversity in their classrooms.

#### Statement of Purpose and Research Questions

Each child has the right to learn. However, a review of teaching in Taiwan finds many failures to provide equitable, high-quality educational experiences for

socially and culturally diverse children. In Taiwan there is little documentation on the effective teaching of Indigenous students. Hence, this study explores the beliefs, knowledge, and practices of exemplary teachers of Indigenous students in a variety of cultural contexts. To achieve that objective, the study searches for answers to these main questions:

1. What beliefs and knowledge about teaching Indigenous students guide exemplary teachers?
2. What pedagogical practices are employed by exemplary teachers to address the educational needs of Indigenous students in various cultural contexts?
3. What personal or educational experiences of exemplary teachers shaped their teaching practices and rooted their beliefs and knowledge about teaching Indigenous students?
4. What contextual factors supported or constrained their work?

The study employs case-study methodology to provide a description of exemplary teaching. That approach is based on the belief that there are teachers with a knowledge of teaching and learning and with a teaching skill that elevates their effectiveness above that of most others. Through analysis and interpretation, it is possible to discover and identify their exemplary qualities. Moreover, this study is rooted in the assumption that learning to teach in a culturally diverse environment is a process shaped by each teacher's experiences. Analysis of the personal and professional journeys of exemplary teachers provides the opportunity to develop a better understanding of how their beliefs, knowledge, and skills were shaped as they learned to teach in various cultural settings. Finally, this study deals with the

contextual factors that support or impede teachers' work. Understanding those factors can help teacher educators and administrators support the process of change in teachers' practices that better address issues of cultural diversity in the classroom.

### Significance of the Study

This study employs case-study methodology to uncover teachers' beliefs, probe their knowledge, and interpret the contextual features of teaching Indigenous students. The studied teachers, who were selected because of their teaching effectiveness, were interviewed and observed, using an interpretive mode of inquiry. This in-depth exploration of their operational style provided valuable information that verified their exemplary reputations. Such specific and detailed profiles can help educators learn to teach more skillfully in cultural diverse settings.

Clearly, developing and maintaining an excellent teaching force requires that teacher educators pay attention to the characteristics of a broad spectrum of preservice and in-service teachers. A description of exemplary teaching of Indigenous students in a variety of cultural contexts can offer student teachers a preview of ways in which minority students are taught, the challenges they might face in culturally diverse classrooms and communities, and the knowledge of various coping strategies used by successful teachers to deal with their problems. In particular, by providing contextual examples in the form of accounts about learners and teachers in varied cultural classrooms, student teachers can begin to understand situations in which they may find themselves and reduce their anxieties about the uncertainties of teaching culturally diverse students.

Research on exemplary practices in a variety of cultural contexts could help teacher educators and school administrators. This research could help them gather accurate information about exemplary teachers' beliefs, knowledge, practices, and experiences. That information could be utilized to update teachers' perspectives, enlarge their repertoire of teaching skills, and facilitate the transformation of the information into the development and mastery of effective classroom practices for meeting the learning needs of Indigenous children. Additionally, this study explores the contextual factors that have enabled or constrained exemplary teachers in culturally diverse classrooms. Investigation of those factors could provide insights for personal and professional change in teaching culturally diverse students. In the end, all students could benefit from the improved teachers' practices.

By documenting the beliefs, knowledge, skills, and experiences of exemplary educators in various cultural contexts, this study provides a holistic description and interpretation of effective teaching. These case studies are intended to contribute to our understanding of culturally diverse teaching, particularly of Indigenous students and could well serve future theoretical constructs in Taiwanese professional literature. Moreover, the findings from these limited studies could advance alternative perspectives on the nature and development of expertise in teaching, in a wide range of venues, by comparing exemplary practices for minority students in large, diverse societies, such as Australia, Canada, and the United States. Such cross-cultural exchange and understanding could ultimately illuminate wider dimensions of effective practices that expand and refine current theories of culturally diverse teaching.

## Definitions of Terms

The following terms are clarified and used consistently throughout the study.

### *Taiwanese Indigenous Students*

*Taiwanese Yuan Ju Min*, a Chinese term, refers to the inhabitants of Taiwan before the arrival of the Han Chinese from mainland China. This study's use of the term *Indigene*, rather than *Aborigine*, for the *Yuan Ju Min*, is based on the meaning of the translation. The term, *Aborigine*, translates in Chinese to *Tu Ju*, implying barbarians and uncivilized people. The term, *Indigene*, translates in Chinese to mean native people in a region, which is less discriminatory and closer to the meaning of *Yuan Ju Min*. Therefore, the use of the term *Taiwanese Indigenous people* in this study means *Taiwanese Yuan Ju Min*.

Indigenes are the minority in Taiwan, with languages and culture that are different from the majority of Han Chinese people. Most Indigenous people live in the counties of Taitung, Hualian, Taipei, and Kaoshiung (Department of Statistics, 2004). This research was conducted in Taitung County, located in southeast Taiwan and included six different tribes of Indigenous Taiwanese: Paiwan, Puyuma, Rukai, Bunun, Ami, and Yami. The terminology used in this study primarily focused on Indigenous students who had lower achievement and came from lower socio-economic backgrounds in the elementary schools of Taitung County.

### *Cultural Context*

This research was conducted at the elementary schools in Taitung County, which is composed of one city, two towns, and thirteen villages. The elementary-school students in the county attend classes in one of three culturally diverse settings.

Schools in the city are populated predominately by Han Chinese students. In the near-city villages, Han Chinese and Indigenous students are mixed in each classroom. The other towns and villages are in Indigenous areas with mostly Indigenous students. The term “cultural context” as used in this study, refers to the elementary schools of the study’s subject teachers in their different locations—the city, the near-city village, and the Indigenous area in the county.

### *Exemplary Teachers*

“Exemplary teachers” refers to the participating elementary-school teachers who were the subjects of this study. At the request of the researcher, effective teachers of Indigenous students were identified as participant candidates by knowledgeable Taiwanese school officials: the superintendent of the Taitung Education Bureau, university faculty members at Taitung University, and principals and administrators of Taitung elementary schools. From the resulting recommendations, three female Han Chinese teachers were selected, based on these criteria: each taught the major subjects: Mandarin and mathematics, and each had more than five years’ teaching experience, with three years in the same cultural context in which she was teaching. Each teacher was selected from a differing cultural context—one from a culturally diverse area (a near-city village), one from the primarily Han Chinese area (Taitung City), and one from an Indigenous area—in order to study how Indigenous students are taught in various cultural contexts.

### Organization of This Study

This dissertation consists of seven chapters. This first chapter is the introduction to the study, including the problem statement and study rationale,



purpose, questions that guided this research, the significance of the study, definitions of relevant terms, and this overview. Research clearly indicated that Indigenous students continued to fail in the Taiwan public school system. One obvious solution to that continuing educational problem—and the major underlying assumption of this study—would be to improve classroom instruction. This purpose of this study is to identify the successful pedagogical practices of three exemplary Taiwanese elementary school teachers, each in a different cultural context. A study of this nature could provide a framework for effective teaching for low socio-economic Indigenous students. This study also explores school-based factors that enabled or constrained the exemplary teachers. Understanding those factors could help teacher educators and administrators pursue the process of change in teachers' practices, to better address issues of cultural diversity in the classroom.

Chapter Two, "Literature Review," presents theoretical perspectives, as well as empirical data specific to the research topic. It highlights, in particular, successful teachers' beliefs, knowledge, and practices. It includes teachers' personal and contextual factors that affect their beliefs, knowledge, and practices. Taiwanese research on those topics is also reviewed. The purpose of the literature review is to stipulate what is known and unknown about the topic, so as to identify what contribution to the field this study could make.

Chapter Three, "Methodology," details how this study was conducted. First, there is an explanation for having chosen the case-study framework; then, an explanation of how the participants and research settings were chosen. Next, the data-collection techniques are explained, as well as the approach employed for data

analysis and interpretation. Finally, subjectivity factors are expressed, along with compensating methodology to ensure objectivity.

Chapter Four through Chapter Six present, first, the findings of the case studies of Ms. Huang, Ms. Chen, and Ms. Kao, respectively, providing details of the participating teachers' backgrounds; and, then, interpretations of the data that answer the research questions. In each chapter, the teacher's background and her teaching context are described, followed by details of her beliefs about and knowledge of the learning and teaching of Indigenous students, the curriculum, her teaching style, and Indigenous parents and families. Her teaching practices, which are guided by her beliefs and knowledge, are emphasized. Perceptions of experiences and factors that influenced beliefs, knowledge, and practices are identified.

Chapter Seven, "Analysis and Implications," describes the conceptual framework employed to analyze the collected data. Next, common themes that emerged from across the three case studies are identified and analyzed. The final section identifies implications for teacher education and school administration, based on the study's findings, then suggests directions for future research.

## CHAPTER 2

### LITERATURE REVIEW

This chapter deals with the topics that are the backbone of this study: teaching practices, teacher beliefs, and teacher knowledge. The first section, “Teacher Beliefs and Knowledge,” reviews the theoretical and empirical literature relating to teacher beliefs about and knowledge of culturally diverse teaching. The second section, “Teaching Practices,” provides the theoretical and empirical perspectives regarding strategies that teachers use to teach culturally diverse students. The third section reviews studies pertaining to various factors that influence teacher beliefs, knowledge, and teaching practices. The fourth section covers Taiwanese research on teacher beliefs, knowledge, and the teaching of Indigenous students. Each section concludes with a summary of the reviewed literature.

#### Teacher Beliefs and Knowledge

This section introduces the theoretical and empirical literature relating to teacher beliefs about and knowledge of culturally diverse teaching. It is organized into two parts: (a) teacher beliefs regarding culture and its effect on their teaching practices, and (b) teacher knowledge about culturally diverse teaching.

#### *Teacher Beliefs Regarding Culture and Its Effect on Their Teaching Practices*

Teachers bring to classrooms their unique mix of beliefs from their own cultural and socio-economic backgrounds. Their beliefs mold their teaching practices, shape their expectations about student learning, and influence what their students ultimately will learn (Irvin, 1990; Stuart & Thurlow, 2000; Tatto, 1996). Because

teacher beliefs are so fundamental, researchers have long studied them in relation to cultural issues in order to find relationships between teacher beliefs and the learning of students in culturally diverse classrooms.

Studies suggest that teachers often have a “color-blind” perspective in teaching culturally diverse students (Garza, 2005; Schofield, 1986; Valli, 1995). From that perspective, teachers do not see race as relevant to their teaching and do not believe race to be an important factor in the learning process. Thus, teachers fail to address the diverse learning styles and needs of students who differ from them socially and culturally (Darder, 1991; Nieto, 1992). Researchers have also found that some teachers have biases about the intellectual potential and abilities of students of color. Those teachers view student diversity as an obstacle to be overcome, rather than a positive resource for student learning (Goodlad, 1990; Zeichner & Hoefft, 1996). They hold low expectations for poor and minority students and attribute the academic failure of students of color to factors beyond teacher control (Goodlad, 1990; Irvine, 1990; Montero-Sieburth, 1996). With those perspectives, teachers feel that they cannot effectively teach students of color (Pang & Sablan, 1998) and would rather not teach in urban areas (Haberman, 1989; Sparapani, Abel, Easton, Edwards, & Herbster, 1995).

Researchers point out that teachers who do not understand or notice achievement and discipline problems of students from culturally and socio-economically diverse backgrounds are more likely to misinterpret students’ communication styles, both verbal and non-verbal—and that, in turn, leads to misdiagnosing educational problems and mistreating students of color and poor

students (Hilliard, 1992; Katz, 1999; Rist, 1970; Schofield, 1986). For example, Rist (1970) conducted an ethnographic, longitudinal study to understand how teachers' expectations influenced their behavior toward socially and culturally diverse students in their kindergarten, first-grade, and second-grade classrooms. Findings showed that teachers' expectations about the students' abilities and learning were formed within the first two weeks of school, as they received preliminary information about the students' physical appearance, behavior, and performance. Based on their expectations, teachers treated the students differently. Rist observed that teachers viewed students of high socio-economic background as having desirable behavior and performance and gave them more academic attention and interaction and less disciplinary attention. Conversely, teachers perceived children of color and poor children as slow learners, had lower expectations of them, spent less time interacting with them, and gave them more control-oriented directions. Students of color and poor children were also more often placed in lower-level reading groups and were ascribed to positions that kept them apart from other students.

Schofield (1986) provided evidence of the negative effects of color-blind beliefs in an ethnographic study in a desegregated middle school with a half-Black, half-White student population. The researcher found that the teachers' color-blind beliefs resulted in negative outcomes for students of color. Teachers who advocated a color-blind approach chose to look at academic and behavior problems of students of color on an individual basis instead of considering students' cultural backgrounds or modifying their teaching to meet the needs of those students. The study found that

Black students in those teachers' classrooms were suspended and disciplined more often and performed less well academically than their White peers.

On the other hand, studies of exemplary teachers show that they strongly support the education of culturally diverse students. For example, Owles (2001) conducted a case study of an early-childhood expert teacher to examine how she advanced the social, intellectual, and literacy development of her students from diverse cultural, racial, and socio-economic backgrounds. The researcher found that the expert teacher believed that all of her students were intelligent and had the capacity to be resourceful and independent learners. This researcher also found that those beliefs were part of the teacher's value system. They guided her classroom actions, such as maintaining a high degree of intellectual expectation and respect for learners, scaffolding for children as they moved ahead in their learning and development, and encouraging students to conduct in-depth studies and inquiries for intellectual stimulation. The teacher also created a safe, home-like environment in her classroom, keeping an abundance of resources at hand for her diverse students' needs.

Selecting subjects from teachers who were identified as exemplary for teaching culturally diverse students, Olsen and Mullen (1990) and Ladson-Billings (1994) had similar findings. Olsen and Mullen interviewed 36 effective teachers, recommended by their supervising principals, who taught in culturally diverse schools, in an attempt to correlate their beliefs and practices. Ladson-Billings studied eight excellent teachers who were nominated by parents, principals, and colleagues for being excellent teachers of African-American students. The effective teachers in both studies showed similar beliefs about working with students of color. Teachers in the

studies believed that students are individuals who are capable of learning, regardless of their background, and that teachers can make a difference in their students' achievement and development. Those beliefs correlated with patterns of practice that teachers said were essential for effectiveness with diverse students in Olsen and Mullen's study and that were displayed by successful teachers in Ladson-Billings' study. Those practices included maintaining high expectations and positive affirmation, developing curricula and instruction that incorporated the children's cultures into the classroom, and creating a learning community where students learned from each other. Ladson-Billings' study also found that students in those successful teachers' classrooms had higher self-esteem and experienced academic success.

#### *Teacher Knowledge about Culturally Diverse Teaching*

As concerns about cultural-diversity issues escalated in recent years, scholars and researchers began to explore what teachers should know in order to deal effectively with increasing diversity. The following overview of the theoretical and empirical research analyzes teacher knowledge about diversity and synthesizes it into five categories: (a) teachers' knowledge of their own cultural assumptions, (b) knowledge of cross-cultural differences, (c) knowledge to restructure curriculum to deal with diversity, (d) knowledge of ways to create culturally relevant education, and (e) knowledge of injustices and ways to address them.

*Teachers' knowledge of their own cultural assumptions.* Teachers bring into the classroom their own cultural perspectives, which play out in their practices (Tatto, 1996). However, teachers rarely have the opportunity to challenge their intrinsic

assumptions about culturally diverse learners. Their own cultural backgrounds also remain unexamined (Ladson-Billings, 1994). Lacking an awareness of their cultural perspectives, teachers are not sensitive to the diversity of their students' social and cultural backgrounds, nor are they aware of the problematic nature of teaching in the first place. As a result, teachers may attribute any difficulties in the classroom solely to the students (Goodlad, 1990; Irvine, 1990; Montero-Sieburth, 1996). Those statements should alert educators to the importance of developing a keen awareness of how their own cultural heritage and personal identity shape their beliefs about culturally diverse learners and how those beliefs affect their actions and practices. Researchers have found that teachers who are more aware of their cultural assumptions are more likely to change their behavior and to facilitate effective interaction between themselves and their students (Spindler & Spindler, 1993; Tatum, 1992). Moreover, through awareness and interaction, teachers can help improve students' critical consciousness of different cultures and stereotypes regarding those cultures, thereby allowing them to face and reduce prejudiced behavior, and to develop more positive cross-cultural relationships (Darling-Hammond, French, & Garcia-Lopez, 2002; Tatum, 1992).

*Knowledge of cross-cultural differences.* Cummins (1989) and Deyhle (1995) concluded that minority students were more successful in school settings where they felt they were not alienated from their own cultural values, where they had a stronger sense of cultural identity and less racial conflict, and where they received academic support consistent with their cultural style. Accordingly, a critical step in becoming an effective teacher of diverse students was to understand students in non-



stereotypical ways, understanding and acknowledging the ways in which cultural context influences their lives and education (Darling-Hammond et al., 2002).

Researchers on effective teachers have found that they invest considerable time and energy acquiring information about their students, learning to observe students carefully and non-judgmentally, and seeking to understand their thinking and behavior styles (Ladson-Billings, 1994; Macdonald, 1995; Mayer, 1994; Moll, Amanti, Neff, & Gonzalez, 1992). Rooted in an understanding of their students' cultures, effective teachers consider different practices to facilitate better learning among culturally diverse students. Moreover, they make an effort to understand the community life in order to incorporate community resources into teaching, and they communicate with parents to help their children for academic success.

*Knowledge to restructure curriculum to deal with diversity.* Researchers have found that the history, perspectives, and culture of minorities have been ignored or misrepresented in the curriculum, textbooks, and professional literature (Asante, 1991; Banks, 1993; King, 1992; Nieto, 1998). Hence, students often studied historical events, concepts, and issues primarily from the point of view of the mainstream population, and there was no way to locate marginalized students in the context of their own cultures. Thus, scholars and researchers have suggested that teachers need to understand and detect biases or misconceptions in textbooks and other reading instructional materials and to recognize the knowledge in minority cultures in order to promote a genuine comprehension of social realities (Asante, 1991; Banks, 1993; Bennett, 2001; King, 1992). Furthermore, scholars and researchers have encouraged teachers to integrate life experiences of disenfranchised students into the official

curriculum in order to recognize and affirm diversity and to stimulate their interest in learning (Asante, 1991; Banks, 1993; Garibaldi, 1992).

*Knowledge of ways to create culturally relevant education.* Researchers have pointed out that the differences between students' cultural backgrounds and the dominant school culture affect culturally diverse students' learning and academic achievement (Katz, 1999; Nieto, 1998; Terrill & Mark, 2000). Accordingly, scholars have suggested that developing an in-depth understanding of culturally relevant teaching should be a prerequisite for teachers preparing to teach culturally diverse students. That foundational knowledge, which underlies successful diverse teaching, would require that teachers understand how to: (a) select and use instructional materials that are relevant to students' experiences outside school, (b) design instructional activities that engage students in personally and culturally appropriate ways, (c) make use of pertinent examples or analogies drawn from the students' daily lives to introduce or clarify new concepts, (d) manage the classroom in ways that take into consideration differences in interaction styles, and (e) use a variety of evaluation strategies that maximize students' opportunities to display what they know in ways that are familiar to them (Zeichner, Grant, Gay, Gillette, Valli, & Villegas, 1998).

*Knowledge of injustices and ways to address them.* Cummins (1989) pointed out that students were less likely to fail in a school setting where teachers and administrators cared for and respected them and their culture. By contrast, minority students felt discriminated against or excluded from their schools in a climate that perpetuated racist attitudes toward them. Accordingly, scholars have suggested that teachers need to have knowledge of the context in which inequities have been born

and nurtured—and in which they can also be eliminated. That knowledge comes from their understanding the injustices inherent in a system that renders voiceless and powerless its marginalized student population. That knowledge underscores the key role that teachers should play in redressing inequities and creating a new context that values diverse students' experiences and provides an equal opportunity for all students to attain academic and social success in school (Banks, 1994; Darling-Hammond et al., 2002; Freire, 1998; Giroux & McLaren, 1986; Zeichner, 1993).

### *Summary*

This section discussed studies of teacher beliefs about cultures other than their own and the effect of those beliefs on their teaching practices. Results showed that some teachers held negative perspectives of students, which often correlated with practices that did not support the academic development of all children. Nonetheless, other studies on effective teachers showed that they had an affirming perspective toward diversity and a belief that students from non-dominant population groups were capable learners. Those beliefs were found to undergird teachers' pedagogy in ways that met students' academic needs.

This section also provided an overview of the theoretical and empirical research that analyzed teacher knowledge about cultural diversity. Results revealed that, to construct a context that enables all students to learn successfully, a teacher's knowledge of culturally diverse teaching should include an awareness of her or his own cultural perspectives of others; sufficient cross-cultural knowledge to understand students' cultural backgrounds; the knowledge required to examine traditional curricula critically and to incorporate students' life experiences into the curriculum;

the knowledge to develop culturally relevant teaching that is relevant to students' diversity; and knowledge of related injustices, in order to avoid repeating them.

### Teaching Practices

Given changes in the demographics of school populations and ample evidence that minority students do not succeed in mixed educational groupings, theorists and researchers have made recommendations for providing teachers with skills and attitudes needed for responding to issues of cultural diversity and attendant challenges. This section is divided into two parts to reflect the two aspects of understanding teaching practices for coping with cultural diversity in the classroom: theoretical perspectives and empirical research.

#### *Theoretical Perspectives on Culturally Diverse Teaching*

Scholars point out that every student comes to school with a set of values and experiences from his or her upbringing that shapes his or her perceptions about different ethnic groups (Banks, 1994; Dewey, 1938; Nieto, 1992). Learning occurs best, as Dewey (1938) urged, when the curriculum and instruction are connected to the learner's experience. Hence, Dewey encouraged teachers to become aware of each student's background knowledge and experience and to value the interests and learning capacities of the individual child. Furthermore, he suggested that teachers respect individual freedom in a learning environment and foster positive interpersonal relationships and interactions with and among students. Subscribing to the vision of democratic education, Bank and Nieto asserted that teachers should develop an *equity pedagogy* that respects each student's experience and makes the teaching more relevant to each student's cultural background. They believed that equity pedagogy

would help overcome the problems minority students face and ensure that they attain the highest levels of academic excellence.

Noddings (1995) advocated that *caring* is an essential interpersonal skill for developing the learner's character and increasing his/her desire to learn, which is "probably more important in children's lives than any particular curriculum or pattern of pedagogy" (p. 676). Therefore, she asserted, the education of the whole person, his or her intellectual, social, moral, and emotional being, within a caring community is the purpose of schooling and the goal of teachers. What teachers should do, Noddings (1984) suggested, is to teach in a caring community through modeling, dialogue, practice, and confirmation. Teachers should serve as model caregivers, with full consideration of each student both within and outside the school context. Moreover, teachers should establish their classrooms as motivating, interesting, and caring places where trusting relationships can be constructed and students can ask questions, try out their ideas, and feel "understood, received, respected and recognized" (Noddings, 1992, p. xi).

A number of authors consider *critical pedagogy* the most constructive approach to empower the learning of marginalized students (Freire, 1970, 1998; Giroux & McLaren, 1986; hooks, 1994; Moss, 2001; Wink, 1997). Critical theorists see the role of teachers as "transformative intellectuals" (Giroux & McLaren, 1986, p. 303), who continue to assess their beliefs and prejudices while relating to people from different ethnic groups, and who transform the injustice that occurs in the outside world to social justice in teaching. For that to occur, critical theorists suggest that teachers create a classroom of freedom and democracy. Within the classroom, "The teacher is

no longer merely the-one-who-teaches, but one who is himself taught in dialogue with the students, who in turn while being taught also teaches” (Freire, 1970, p. 61). Through the mechanism of dialogue, the teacher no longer assumes an authoritarian position that consists of dispensing knowledge. On the contrary, learning takes place in an environment where teachers and students both see themselves as learners. To this end, they create knowledge together and act toward liberating themselves from dehumanizing conditions.

### *Empirical Research on Culturally Diverse Teaching*

Empirical research on the theorists’ promising perspectives offers more concrete images of teaching in the multicultural classroom. First, researchers found that successful teachers understood students’ backgrounds and incorporated students’ culture into the classroom instruction, which made learning easier for students from socially and culturally diverse backgrounds (Au, 1980; Dillon, 1989; Foster, 1995; Heath, 1983; Ladson-Billings, 1994). For example, Au (1980) studied the manner in which a Hawaiian teacher improved the reading skills of Native-Hawaiian students from lower socio-economic backgrounds. Au found that developing reading lessons that involved the students’ culture was the key factor that improved the students’ reading comprehension. In the same way, Heath (1983) conducted an ethnographic study in the Piedmont region of the Carolinas, looking for an explanation for the low achievement of working-class Black students. She found that they failed to respond to simple questions because of language and cultural differences between the teachers and the low-income families and community. She worked with teachers to develop a curriculum that integrated community resources into their instruction. The strategy

helped students better understand the questions asked in the classroom, which increased their performance. Similarly, in her study of a lower-level reading teacher, Dillon (1989) found that the teacher not only incorporated students' culture into her instruction, but also encouraged students to use their dialect and to interact with the teacher and one another in the way they were used to in their families and community. Those strategies, Dillon observed, "promoted active participation and allowed students to focus on learning the content" (p. 245).

Ladson-Billings (1994) and Foster (1995) selected a group of teachers who were identified as exemplary and compared their similarities in successful teaching of minority students. Their results supported the findings of Au (1980), Heath (1983), and Dillon (1989). Ladson-Billings studied eight teachers (five African American and three White teachers) who were nominated by parents, principals, and colleagues as excellent teachers of African American students. The researcher found that the teachers' pedagogical practices revealed a respect for children's prior knowledge and cultural backgrounds, an effort to incorporate students' real-life experiences into the official curriculum, and a willingness to extend activities beyond the classroom and into the community. Those strategies, Ladson-Billings noted, improved students' learning and fostered their self-confidence in the classroom. Culturally responsive teaching and community orientation were also found in Foster's (1995) study. By using the method of *life history inquiry*, Foster explored the teaching of seventeen exemplary African American teachers who were recommended by members of the African American community. Her findings showed that the teachers were committed to educating African American children and to utilizing their knowledge of their

culture in designing curricula and instruction that responded to students' backgrounds. The teachers also made an effort to connect the students' learning with their community in order to improve their learning and develop their cultural identities.

The virtue of caring, which was treated in some research, served as a catalyst for fostering students' learning (Henry, 1992; Ladson-Billings, 1994; Macdonald, 1995). For example, the eight successful teachers in Ladson-Billings' study and the five African American female teachers in Henry's study acted as the students' "other mother." The teachers understood the students' poverty-ridden background, so they created caring classrooms that provided feelings of security, intimacy, and trust. Macdonald (1995) used case-study methodology to illustrate a teacher's expertise with multicultural groups of students. The teacher understood that, for many of her poor students, neither their parents nor the school had the time, material resources, or human resources to help them do their assignments, so she used a partnership approach, having the students help each other, and provided information and other resources for their learning needs.

Another way the exemplary teachers demonstrated their caring was by building upon students' strengths (Ladson-Billings, 1994; McDermott & Rothenberg, 1999; Owles, 2001). For example, McDermott and Rothenberg studied the characteristics of exemplary teaching of three urban elementary school teachers in Canada. Findings revealed that the exemplary teachers committed to and held high expectations for their children's learning. The teachers in Ladson-Billings' study also showed a capacity to see students' potential and to communicate that to the students. They



expressed confidence in the learning ability of the students and routinely raised their expectations to attain higher academic goals. Students in those teachers' classrooms, Ladson-Billings stated, experienced academic success and high self-esteem. Owles' case study of an early-childhood expert teacher who taught in a socially and culturally diverse classroom revealed that the teacher maintained high intellectual expectations for her learners. She encouraged students to conduct in-depth studies and research projects to stimulate them intellectually. She also created a safe, home-like environment in her classroom, keeping an abundance of resources at hand for her diverse students' needs.

Characteristics of *critical pedagogy* were also indicated by the research (Ladson-Billings, 1994; Levine, 1988; Seldin, 1999). For example, Ladson-Billings found that successful teachers who were aware of themselves as political beings also resisted the status quo of African American students. The teachers tried to help students engage in collective learning and were committed to helping students actively reject the status quo. Similarly, Seldin studied the teaching of an African American educator and her fifth-grade classroom in an elementary school in a working class neighborhood in Canada. She found that the teacher helped her students achieve academic success while maintaining a positive identity as African Americans.

Levine conducted an ethnographic study in a magnet school with ethnically diverse students in order to examine how teachers, as well as students, learned to overcome failure in an urban school environment. Levine recounted the success of an African American male teacher who believed that students had their own perspectives,

which might differ from those of others and which needed to be valued. Therefore, the teacher democratized his classroom to show respect for his students' opinions. He encouraged his students to share their points of view through dialogue. Also, he routinely raised questions about varying perspectives of subjects studied. Levine offered evidence that students who normally participated in such activities interacted more with their peers and fostered respect for cultural diversity.

Overall, the body of research on teaching practices supports the theoretical perspectives of teaching for diversity, such as culturally responsive teaching, the disposition of caring, and critical pedagogy. According to the findings of this research, then, successful teachers in culturally diverse classroom attended to individual and cultural differences by providing culturally responsive instructional activities and by serving as interpreters between the school and the home culture. Those teachers also acquired a deep understanding of the realities of their students' lives, so they could establish caring relationships with the students and inspire them to learn in spite of wretched circumstances in their homes and communities that mitigated against their success. Moreover, those teachers committed to helping their marginalized students improve their status and organize a democratic classroom, where their knowledge and perspectives would be respected and valued. Evidence from the studies showed that the social organization of classrooms, as well as instructional activities employed by successful teachers, resulted in students being able and willing to successfully participate in learning and develop their positive self-confidence and cultural identity.

### *Summary*

This section surveyed theoretical perspectives and empirical research on teaching strategies necessary for working with individuals from different cultures. Both of those two fields of literature pointed out that successful teachers of culturally diverse students are willing to support diversity, develop students' academic capabilities, and commit to teaching for social justice. That vision combines strategies and dispositions to create a pedagogy of culturally relevant teaching that builds bridges between the culture of the classroom and that of its students. It manifests a genuine caring about students' academic and social needs in order to help them succeed. It demonstrates a deep sense of moral and ethical accountability to be aware of personal prejudices and to honor and respect students' diverse voices, ideas, experiences, and contributions. Evidence was found that teaching in a culturally responsive way encouraged students to respect diversity, promoted their active participation, and had a positive effect on their academic achievement, self-confidence and cultural identity within the classroom.

### *Factors that Influence Teacher Beliefs, Knowledge, and Practices*

This section consists of a discussion of literature relevant to factors that influence teacher beliefs, knowledge, and culturally diverse teaching. Those factors include: (a) teachers' cultural background, (b) teachers' personal history, (c) teacher education, and (d) school context.

### *Teachers' Cultural Background*

Some researchers have attempted to identify and investigate the factors that influence teacher beliefs and culturally diverse teaching and found that a teacher's

cultural background is a significant factor (Lipman, 1998; Montero-Sieburth, 1996). Lipman used ethnographic methods to study two schools' reform efforts in restructuring. As part of her study, she examined teachers' beliefs about students of color and found that African-American teachers in her study held more positive beliefs toward Black students' learning than White teachers did. Montero-Sieburth studied teachers' beliefs about Latino students in an urban high school and found that teachers of color did not hold a color-blind perspective or negative view of under-achieving students. Both of their studies also showed that the practices of many teachers of color differed from those of other members of the predominantly White faculty. Teachers of color demonstrated culturally responsive practices with their students and held high academic expectations of their students. In contrast, both the Black and the White successful teachers in Ladson-Billings' (1994) study held similar beliefs and displayed similar characteristics of culturally responsive pedagogy. However, her study selected exemplary teachers, focusing on the similarities of these teachers' beliefs and their successful pedagogy across differing cultural backgrounds. Thus, race differences that influenced teachers' beliefs and their practices might not have been salient factors in her findings.

On the other hand, in Lipman's and Montero-Sieburth's studies, race did emerge as an issue. However, some teachers, especially White teachers, might not be sensitive to their own race issues that influence their beliefs or they might be reluctant to examine their beliefs and practices in relation to race. As Tettegah (1996) stated, "White teachers may claim or admit having racist attitudes toward persons in the general population, but profess that their attitudes toward students in their classroom

are different” (p. 160). White teachers, in Lipman’s and Montero-Sieburth’s studies, did not bring up the issues of race more often than teachers of color.

### *Teachers’ Personal History*

Researchers have used narrative inquiries to learn teachers’ thoughts and practices and to examine the various contexts that define teachers’ experiences. Some found that what teachers knew about teaching derived from links between their personal histories and their professional careers—links that shaped and directed the teachers’ professional decisions (Britzman, 1991; Clandinin & Connelly, 1995; Foster, 1995; Henry, 1998; James, 2002). For example, Britzman (1991) studied two teachers’ experiences and pointed to four chronological phases in the process of becoming a teacher: prior educational experience, university and teacher education, student teaching, and experiences as a new teacher. Henry (1998) studied the lives of five female African Canadian teachers, while James (2002) studied the life history of a Black male teacher. The teachers in those two studies recounted that their own oppressive experiences with racism and discrimination fed their desire and commitment to improve the educational experiences of Black students. Essentially, studies of teachers’ narrative responses revealed that their practical knowledge was developed from their experiences and personal histories relating to teaching, which helped them form a better understanding of their work.

### *Teacher Education*

Some researchers have investigated whether teacher-education courses have the potential for influencing student teachers’ beliefs and their practices. Ross and Smith (1992), for example, used case-study methodology to understand six White preservice

teachers' beliefs about diversity. Data were collected from interview transcripts from preservice teachers along with their reflective journals and written work for student teaching. Based on preservice teachers' reports, researchers found that three preservice teachers' beliefs about diversity changed, moving toward an awareness of the culture of students after a semester-long multicultural course. However, the purported changes of these preservice teachers' beliefs did not actually translate into their practices. A similar view was described by Finney and Orr's (1995) and Ladson-Billings' (1991) studies. Both studies found that, after taking the cross-cultural course, students articulated increased knowledge of diversity, as well as changes in their beliefs, but researchers did not find significant changes in their subsequent practices, reflecting those newly espoused beliefs. Most of the studies (Finney & Orr, 1995; Ladson-Billings, 1991; Ross & Smith, 1992) described the inconsistency of teachers' beliefs and actions but did not look for contradictions among beliefs and behaviors in actual classrooms.

Valli's (1995) study was one of few that examined the relationship between preservice teachers' beliefs and their practices during practice teaching with predominantly Black students. Her data were based on classroom observations and interviews with preservice teachers, along with study of their papers and seminar discussions. Valli found that, at the beginning, many of the preservice teachers held negative opinions about Black students' culture, which represented a barrier between them and their students. As they became more familiar with teaching, many of them shifted to a color-blind perspective, which lessened the racial distinctions between themselves and the children. Valli also discovered that some preservice teachers

learned to deal with the racial differences between themselves and their students and tried to integrate multicultural content to build relationships with the students. By investigating teachers' beliefs and their practices, the study contributes to the understanding of different beliefs, their development, and their connection to teachers' practices.

For in-service teachers, Greenleaf, Hull, and Reilly (1994) studied professional development groups that used case studies to help teachers rethink problematic teaching and address the issue of diversity. They brought real situations into the teachers' classrooms to obtain teachers' input to diagnose problems. The researchers analyzed teachers' conversations with their colleagues in the groups and reported that the learning groups fostered teachers' reflective and critical thinking on the issues of teaching diverse students. Cabello and Burstein (1995) conducted case studies of two teachers' responses to a graduate course designed to help teachers teach for diversity more effectively. One case was an African-American teacher who taught in a predominantly Black school. Another case involved a European-American teacher who taught in a predominantly African-American and Latino inner-city school. Data collection included questionnaires about teachers' beliefs, their reflection logs, a teaching-strategies project, a case study of culturally diverse students, and an exit interview. According to their findings, both the Black and the White teachers reported that they had become more aware of different cultural backgrounds and needs of their students and had learned to modify their practices by using more culturally responsive teaching methods. Overall, those two studies (Gabello & Burstein and Greenleaf et al.) focused on exploring the effects of professional groups or graduate courses on

teachers' teaching by examining teachers' conversations or written documents. The studies did not directly evaluate what teachers had learned from the professional development programs or graduate courses that transformed their practices.

In order to understand how teachers have learned from such programs and how much effect the programs had on teachers' practices, Sleeter (1992) conducted a two-year ethnographic study to examine 30 classroom teachers' responses to a multicultural professional development program. Designed to provide strategies to help teachers improve their instruction for culturally diverse students, the program included strategies, such as raising racial awareness, using cooperative learning, and communicating with parents. Data collected were based on teacher interviews and classroom observations. Sleeter found that teachers' reported changes in behavior and thinking were, in fact, not supported by classroom observations. Sleeter conducted follow-up interviews to discover what caused the discrepancy. They included lack of time, the mandated curriculum, oversize classes, disjuncture between schools and homes, and teacher isolation within a bureaucratic hierarchy. The study provides evidence of factors that hindered teachers' implementation of multicultural education, which should help school administrators initiate reforms that will facilitate worthwhile teaching changes.

### *School Context*

Some researchers have explored the influences of contextual factors on culturally diverse teaching. Those factors included the school's geographical location and the school culture. Concerning school location, Solomon, Battistich, and Hom (1996) studied teachers' beliefs and practices in 24 schools in varying social-class



communities. Based on a survey and on classroom observations, the results showed that there were differences in teachers' beliefs about the role of teacher authority and control in the classroom in different school contexts. Teachers in lower-income and urban schools were more likely to rely upon authority and control than those in high-income areas. They required student obedience and did not see their students as having much potential to learn. Anyon (1980) conducted an ethnographic study to examine curricular, pedagogical, and pupil evaluation practices in five elementary schools of different socioeconomic levels. She found that teachers in schools with higher socioeconomic status fostered self-directed learning capabilities and encouraged student decision-making. In contrast the findings of Solomon et al., Anyon found that teachers in schools with higher socioeconomic status gave students more classroom control than those in schools with lower status. The studies of Anyon and Solomon et al. showed relationships between school location and teachers' practices. However, those studies did not interview teachers to understand further what constrained or facilitated their practices, which could have led to a deeper understanding of the dynamics of teacher practices.

Dealing with school's cultural factors, Artiles (1996) pointed out that school policies and practices that supported diversity could promote effective teaching for socially and culturally diverse students. Otherwise, it would have been difficult to gain support for teacher practices aimed at providing equitable pedagogy for all students when working in a school environment that upheld the values of tracking or color-blindness for diverse students. Lipman's (1998) study of school restructuring and Schofield's (1986) study of a desegregated school provided examples of school

cultures of color-blindness, which undermined the teachers' beliefs and effective teaching for students of color. Partington, Richer, Godfrey, Harslett, and Harrison (1999) examined the barriers to a teacher's effective teaching of Indigenous students in Australia. They found that the school principal constructed an environment that reflected the dominant culture and did not welcome Indigenous students and parents. Neither did the principal support teachers' efforts to provide appropriate schooling for Indigenous students. Consequently, the Indigenous students and their parents became alienated, and the teacher's efforts to provide quality schooling for the Indigenous students were inhibited.

In their review of research on teaching and learning in culturally diverse schools, Dilworth and Brown (2001) also demonstrated that many schools avoided the issues of diversity and focused on learning the mainstream language and culture. Such a school environment was inadequate for affirming and connecting with students as individuals and as members of their culture (Dilworth & Brown, 2001). Moreover, Dilworth and Brown pointed out that a tracking policy created unequal learning opportunities for poor children and students of color. Good teachers were often assigned to higher classes with richer resources. Poor students and students of color were often placed in remedial and lower-level courses, which were taught by less-qualified teachers and focused on lower-order creative ability and on learning by repetition. Thus, such groups of students lost opportunities to access the knowledge base and quality teachers. Consequently, their learning and development might be constricted. As Delpit (1995) pointed out, "A skilled minority person who is not also

capable of critical analysis becomes the trainable, low-level functionary of the dominant society” (p. 19).

### *Summary*

This section reviewed studies that examined factors affecting teachers’ beliefs, knowledge, and practices. The findings gleaned from some studies showed the possible influence of teachers’ cultural identities in shaping their views of teaching, as well as their practices (Ladson-Billings, 1994; Lipman, 1998; Montero-Sieburth, 1996). Some studies used narrative inquiries and found connections between teachers’ personal and professional lives (Britzman, 1991; Clandinin & Connelly, 1995; Foster, 1995; Henry, 1998; James, 2002). That contributed to an understanding of how personal circumstances have shaped teacher knowledge and practices. Some studies showed changes in teachers’ beliefs and practices because of teacher educational programs (Cabello & Burstein, 1995; Finney & Orr, 1995; Greenleaf et al., 1994; Ladson-Billings, 1991; Ross & Smith, 1992; Sleeter, 1992; Valli, 1995). Other studies explored facilitating or inhibiting contextual factors, such as school location and climate that affected the quality of teaching and learning (Anyon, 1980; Lipman, 1998; Partington et al., 1999; Schofield, 1986; Solomon et al., 1996). Overall, the literature revealed that most studies used teachers’ self reports to determine changes in teachers’ beliefs, knowledge, and teaching practices. Care must be taken in using self reports to study teaching change because teacher-reported changes might not reflect real change in their actions. More studies based on observations and interviews are needed for a deeper understanding of the changes in teachers’ beliefs, knowledge, and practices, with attention to the various factors

influencing the formation of beliefs about and knowledge of culture and their related practices.

### Taiwanese Research

This section reviews Taiwanese research on teacher beliefs, knowledge, and teaching practices. To explain the contribution this study makes to the field, this section identifies what is known and unknown about the research topic.

#### *Teacher Beliefs and Teacher Knowledge*

An examination of the Taiwanese research on teacher beliefs revealed that most studies used questionnaires to examine the relationship between elementary-school teachers' beliefs and several specific aspects of their careers namely, their efficacy (Feng, 2002; Sun, 2004), classroom-management effectiveness (Chen, 1994), and teaching behavior (Huang, 1995; Liu, 1999; Tang, 1993; Wang, 2003; Yen, 1995). The surveys included teachers' beliefs about curriculum and instruction, classroom management, parent communication, student assessment, learning, and student relations. Most researchers concluded that teachers' beliefs correlated with aspects of their personal backgrounds, including factors such as gender, years of teaching experience, teaching subjects, and preparation. However, none of the studies looked at teachers' beliefs derived from the experiences of teaching Indigenous students.

Chen et al. (1997) initiated the use of survey methodology to investigate teachers' beliefs regarding the teaching of Indigenous students. Their survey was used to explore 1,235 elementary teachers' perceptions toward Indigenous students in the inner city. According to their findings, race and gender were two significant factors.

Indigenous teachers and male teachers were more inclined than female teachers and Han Chinese teachers to believe that Indigenous students were smart.

Overall, the survey methods provided general information about elementary teachers' beliefs and related factors. However, researchers studied the beliefs out of context, failing to bring out the dynamic, situational nature of the beliefs. Using qualitative research methods to investigate the relationships between teachers' beliefs and practices can provide a better understanding of factors impacting beliefs and subsequent action.

A few researchers have begun to use qualitative research methods to investigate teachers' beliefs about education and factors influencing their beliefs. Research topics included the beliefs of a Mandarin teacher (Jou, 1998), an English teacher (Fang, 2003), a science and technology teacher (Hsiung, 2004), an arts and crafts teacher (Liu, 2001), a first-grade teacher (Wang, 2000; Wu, 2002), and a small group of mathematics teachers (Lee, 2004) and social studies teachers (Weng, 2002). Those researchers collected data by adopting the methods of observing, interviewing, and analyzing documents. The research consisted of exploring the teachers' beliefs about teaching different grade levels and subjects. Commonalities have been found across the studies. The results suggested that teachers' beliefs corresponded to their practices. The results from that group of studies also showed that teachers' personal lives, educational and teaching experiences, actual teaching feedback, and educational environments were factors that shaped or changed their beliefs.

Another group of researchers have also used qualitative research methods to probe teachers' practical knowledge by mapping out the constituent parts of teacher

knowledge and by tapping the factors that influenced teachers' practical knowledge. Data were from interviews, observations, and artifacts. Research topics included the practical knowledge of a Chinese teacher (Wang, 2003), a mathematics teacher (Lien, 2001), a social studies teacher (Change, 2000), and a science and technology teacher (Hsieh, 2001; Shih, 2004). Components of teachers' practical knowledge were subject matter knowledge, knowledge of students, knowledge of context, and pedagogical content knowledge. Each component of teachers' practical knowledge complemented the others and guided teacher instruction. In addition, the research showed that the factors influencing teachers' practical knowledge included life experiences, educational experiences, practical training, classroom interaction, and changes in the educational environment.

Generally, the qualitative studies attributed teacher beliefs and knowledge to the personal characteristics of either the teachers or their classrooms, and were, therefore, able to explain sources of teacher beliefs and knowledge and explore deeply the relationships between teachers' beliefs and knowledge and their relationship to teaching experiences and practices. Nevertheless, the studies centered on teachers' beliefs and knowledge and their related practices of teaching Han Chinese students in a specific grade level or subject matter in primarily Han Chinese population areas. None of the studies looked at teachers' beliefs and knowledge derived from the experiences of teaching Indigenous students in the varied contexts of cultural diversity.

### *Teaching Practices for Indigenous Students*

Recently in Taiwan a few researchers began to study teacher beliefs, knowledge, and teaching practices for Indigenous students (e.g., Chou, 2005; Chung, 2003; Lee, 2003; Lin, 2003; Liu, 2004; Wu, 2000). Wu studied a sixth grade, Han Chinese, elementary teacher's beliefs and practices when teaching a multicultural curriculum project. This project was extra-curricular and was designed to help students understand multi-cultural issues. The students were predominantly Han Chinese students, and only one had three-fourths Indigenous heritage. The researcher used qualitative research methodology to collect data from interviews, observations, and artifacts. The researcher examined a teacher's beliefs about Indigenous students and found that they came from stereotypes she held before starting the project. The teacher believed that Indigenous students were good singers and dancers but poor students. The only Indigenous student in her class was a perennial behavior problem. She believed that Indigenous, by nature, were resistant to making the required effort to improve their standard of living and blamed those cultural factors for their lower socio-economic status. She thought that Indigenous parents should take the responsibility to provide a good environment and more care to improve the academic achievement of their children.

After participating in the research, the teacher ascertained that she was now more familiar with the issue of cultural diversity, which helped her understand her Indigenous student's behavior and learning style. For example, instead of viewing the Indigenous student's behavior as unruly, the teacher reported that active behavior was the Indigenous student's learning style. The teacher observed that Indigenous students

liked to show off, so she gave her problem student opportunities to contribute his talent in class. She also tried to praise his sometimes good performance. The teacher reported that, when those strategies were used, the student was better motivated and more engaged in learning.

In relation to multicultural issues, the teacher found that students' sharing their cultural experiences and showing concrete examples or films could promote understanding of different cultures for her students. In her project, Wu further explored factors that affect teaching. The teacher admitted that she did not know much about how to teach Indigenous students, even though she had teaching experience in an Indigenous school and had taught in culturally diverse classes. Lacking the training to teach in the Indigenous culture, the teacher stated that all she could do was to follow the instructional guide. Other factors, such as the mandated curriculum and heavy teaching loads, she added, constrained her teaching for multicultural education considerably. Thus, the only time she had to prepare her multicultural lesson plans was in the mornings, before the official curriculum began or during extra-curricular activity time.

Lee (2003) studied an Indigenous school to find out the interaction patterns and learning progression of the Indigenous (Amis) students. As part of the study, the researcher interviewed a first-grade Han Chinese teacher who taught in a culturally diverse classroom in order to understand the teacher's method of teaching Indigenous students. Lee found that the teacher had a negative perspective toward Indigenous students at the beginning of the term. She perceived that Indigenous students were not good students, as they often did not submit their homework on time and misbehaved



more than Han Chinese students. She also pointed out that a lack of teaching preparation and resources led to lower achievement by Indigenous students. She said that she often disciplined Indigenous students to control their classroom behavior and often felt powerless to improve Indigenous students' achievement.

According to Lee, as the teacher gained more understanding of her Indigenous students, she changed her negative beliefs about Indigenous students and came to believe that all children are equal, and that the teacher should not emphasize differences among cultures. Strategies that she employed in her culturally diverse classroom included: caring for each child as her own, incorporating students' experiences into lessons, establishing a good relationship with each student, and creating a respectful and harmonious classroom atmosphere. The study pointed out the evolution of a teacher's beliefs, from a negative to a color-blind perspective about Indigenous students. Notably, the color-blind perspective did not bring out her practice of ignoring students' needs, as other researchers suggested (Darder, 1991; Lipman, 1998; Nieto, 1992; Schofield, 1986). Instead, color-blindness helped reduce her prejudice and establish a more positive relationship with her Indigenous students.

Chung (2003) explored teachers' ethnic attitudes, awareness of students' differences, and pedagogical praxis in an Indigenous elementary school. Six teachers, including three Han Chinese teachers and three Indigenous teachers, volunteered to participate in the study. Findings based on data from teacher interviews showed that some teachers held color-blind or erroneous beliefs about Indigenous students, which affected their teaching practices. For example, one teacher, Tang, did not consider cultural differences as an important factor that influenced the learning of Indigenous

students. She believed that giving Indigenous students repeated practice was the way to improve their achievement. The researcher noted that the teacher did not reflect on the problems of her own teaching or consider changing her practices to meet Indigenous students' learning needs. Another teacher, Yen, stated that she could not understand or accept the way Indigenous parents and students acted, so she avoided any contact with parents or involvement in the community. She also conveyed that cultural differences were obstacles to her teaching and that she would like to transfer to another school.

Conversely, other teachers in Chung's study were highly aware of the differences between Han and Indigenous students and took concrete pedagogical action. Teacher Wu, a Han Chinese teacher, stated that the cultural mismatch between students' experiences and the curriculum caused Indigenous students difficulty in understanding the content, which reinforced their low achievement. Therefore, she tried to understand her students' culture by becoming more involved in the Indigenous community and incorporating students' life experiences and resources in the community into her teaching. Teacher Le, an Indigenous teacher, indicated that she held a color-blind perspective when she was a novice teacher. Taking a graduate course on multicultural education helped her reflect on her teaching and to understand students' learning problems. Like teacher Wu, teacher Le also believed that the mismatch between the curriculum and the students' life experiences was the main factor that caused lower achievement in Indigenous students. Therefore, she made an effort to teach in culturally responsive ways in order to help Indigenous students understand their culture and to motivate them in learning. Another Indigenous teacher,

Shu, also pointed out that the factors that jeopardized Indigenous students' interest in learning: the language differences and the disregarding of students' life experiences when developing the curriculum. Those perspectives were based on her understanding of Indigenous students, as well as her own education as an Indigenous student. Therefore, she used the Indigenous language to help students understand the content, and she modified the curriculum to make it more relevant to the students' experiences.

However, Chung's findings were based on teachers' narrative accounts with no observation of their practices. Therefore, how teachers' beliefs related to their behavior in the real classroom is unknown. Moreover, the author did not conduct cross-case comparison and analysis, which would have provided more information on the teachers' race, background, beliefs, and practices.

Lin (2003), an Indigenous teacher, studied her own teaching of 12 fifth-grade Indigenous students in an Indigenous school. The purpose of her study was to examine how her own culturally responsive teaching, which she learned from a graduate course, affected students' learning. She used action-research methodology to study her social studies class. Data were collected from videotapes of her teaching, from the journal of her reflections, observations of her students' learning experiences, student interviews, and questionnaires. Analyzing her teaching practices, Lin attributed students' lack of interest and motivation to the mismatch between the curriculum content and the students' life experiences. She applied culturally responsive teaching strategies to improve students' learning; namely, giving concrete examples related to students' cultural backgrounds and from real life, and

encouraging students to share their experiences. She believed that the role of the teacher, as a facilitator, was to ensure that every student had the opportunity to contribute his or her perspectives in classroom discussions. In that environment, the teacher and the students interacted to discover and construct knowledge. They became cooperative contributors to the curriculum.

Another factor that influenced Indigenous students' learning was language differences. The school used the Mandarin language. Indigenous students were accustomed to their own languages. Lin documented that Indigenous students could not express their thoughts well in Mandarin. Their learning was hindered by the language difference, which caused their lower achievement. Understanding Indigenous students' learning difficulty, Lin used Indigenous language to communicate with Indigenous students and to clarify their understanding of the content to be learned.

Moreover, Lin noted that caring, high expectations, positive encouragement, and cooperative-learning methods gave Indigenous students, especially the lower achievers, a sense of confidence and value. To meet students' different learning styles, Lin used various teaching strategies and materials, such as films, concept maps, and role-playing, to help students understand unfamiliar subject matter. Lin found that, in her social studies class, students were more motivated to learn and their achievement in social studies rose, compared to the previous semester, when she did not use those strategies. Student feedback from the interviews and the survey also showed that they readily accepted culturally responsive teaching.

Liu (2004) used qualitative research methodology to investigate how teaching was planned and practiced in an Indigenous school. Data were collected from interviews with the principal, two administrators, and 12 teachers (six classroom teachers, three specialists who were Indigenous teachers, and three Indigenous language teachers from the Indigenous community). Part of his findings showed that two first-grade Han Chinese teachers were aware of cultural difference and taught in a more culturally responsive way in their social studies classes. The teachers reported that they did not learn Indigenous education in college. Therefore, they collected related literature and collaborated with Indigenous specialists and parents to design the curriculum. In implementing the integrated curriculum, they not only integrated students' life experiences into the curriculum and instruction, they also extended activities beyond the classroom and into the community. The teachers found that the integrated curriculum and instruction motivated student learning and promoted their understanding of different cultures in the community. They also reported that the principal respected them and gave them autonomy to design the curriculum and foster collaboration, allowing them to implement the integrated curriculum without constraints.

Chou (2005) examined teachers' perspectives of educating urban Indigenous students. Six teachers, including four Han Chinese teachers and two Indigenous teachers, participated in the study. Data collection relied mostly on periodic semi-structured and informal interviews. According to Chou, the four Han teachers had limited knowledge of Indigenous culture and tended to hold culture-blind perspectives, reducing the role of cultural differences of students in their teaching.

The teachers also believed that significant causes of the poor performance included the Indigenous students' small commitment to academic goals, their loose attachment to their peers and teachers, their parents' inadequate involvement, and their poor family environment. Their teaching methods reinforced the dominant language and values and lowered the academic expectations of the Indigenous students.

By contrast, the two Indigenous teachers were aware of the inequalities in school and society, based largely on having been discriminated against in Han-dominant schools. Typically, they demonstrated a sense of urgency, motivated partly by their desire to correct inequities they perennially suffered and partly to improve the lot of all Indigenous students. They also recognized the inadequacy of information about Indigenous cultures in the school curriculum and tried to modify their teaching to be more culturally relevant. Moreover, they acted as surrogate parents to their Indigenous students. They had more involvement in Indigenous community, such as churches and social networks, than the Han Chinese teachers.

An examination of the research on teaching Indigenous students in Taiwan revealed that some of the findings corresponded to the theoretical and empirical perspectives covered earlier in this chapter. For example, teachers in the studies were aware of the differences between Han and Indigenous students and, in designing the curriculum and instruction plans, took into consideration the students' culture and life experiences. Interpersonal skills, such as caring and positive encouragement, were instrumental in the research. In Lin's (2003) study, the teacher recognized the limitations of teaching from an authoritarian position that consisted mainly of dispensing facts. The teacher and the students together constructed knowledge, which

supported critical pedagogy's perspectives. In particular, to accommodate their learning style and to help them understand unfamiliar subject content, some teachers used multiple strategies and materials, such as cooperative-learning methods, films, concept maps, and role-playing (Lin, 2003; Wu, 2000). Consequently, those instructional practices were shown to motivate Indigenous students to learn and better comprehend their cultures. Lin's study also found that in her social studies class culturally responsive teaching improved the achievement of Indigenous students.

In addition, those studies revealed the factors that affect culturally diverse teaching, such as teachers' cultural background, teaching experiences, teacher education, and school contexts. First, Chou found that there were differences between Han Chinese and Indigenous teachers on how to teach urban Indigenous students. Chung and Lin found that Indigenous teachers were likely to use their native language to help Indigenous students understand abstract concepts and clarify confusing ideas. Second, teaching experiences that shaped a teacher's style would sometimes fail in other cultural contexts. A teacher in Wu's study reported that teaching Indigenous students in an Indigenous school did not equip her with the knowledge to teach other Indigenous students. By contrast, the teacher in Lee's study stated that the more teaching experience with Indigenous students she gained, the more she understood Indigenous students and cared about their learning. Third, multicultural education experiences might affect teachers' culturally diverse teaching. Teacher Le, in Chung's study, and Lin's self study confirmed that multicultural-education courses they had taken in teacher education helped them reflect on their teaching and enabled them to teach in a culturally responsive way. Teachers in Wu's

and Liu's studies asserted that they did not learn multicultural education from teacher education, so they did not have the knowledge or skills for culturally diverse teaching. In terms of contextual factors, teachers in Liu's study reported that their principals' respect for their autonomy and collaboration without intervening was the factor that most facilitated their culturally responsive teaching. Other factors, such as the pressure of mandated curriculum and heavy teaching loads, as portrayed by the teacher in Wu's study, impeded teachers from comprehensively implementing multicultural education.

On the other hand, some limitations are found in those studies. First, Wu's study focused on a teacher's extra-curricula multicultural education project. Lin's and Liu's studies centered on the subject of social studies. Teaching Indigenous students other major subjects, such as Mandarin and mathematics has not been the focus of the research. Some teachers in Lee's, Chung's, and Chou's studies portrayed their teaching of Indigenous students in Mandarin and mathematics classes, but the data were mostly based on teachers' narrative accounts. Few observations were made in the teachers' classrooms. Still needed are observational studies of how teachers interact with Indigenous students and how they carry out their beliefs and knowledge of teaching Indigenous students across different subjects.

Moreover, the scope of studies has been limited to a single teacher, single school, or single area. None of the studies selected teachers who were recommended as exemplary teachers in different school contexts. As a result, exemplary teachers' expertise in teaching Indigenous students at different grade levels in mixed subjects in various school contexts is not yet understood. That line of thinking has led to other



questions: How can exemplary teachers in Taiwan learn to teach diverse cultures throughout their preservice and in-service careers? Which factors enable or constrain their teaching of Indigenous students? What similarities or differences exist between exemplary teaching methods in urban and rural areas? To answer such questions, well documented examples of promising practices and successful development will lead to a better understanding of culturally diverse teaching and will well serve future theoretical constructs in Taiwanese professional literature. This study aims to amplify the usual line of inquiry by examining exemplary teachers' experience and work contexts in order to understand the personal, pedagogical, and contextual characteristics that both define and sustain their effective teaching in culturally diverse classrooms.

### *Summary*

This section examined Taiwanese research on teacher beliefs, knowledge, and practice. Results showed that many researchers employed survey methods to study teacher beliefs. Topics included teacher beliefs and instructional behavior or efficacy (Chen, 1994; Feng, 2002; Huang, 1995; Liu, 1999; Tang, 1993; Wang, 2003; Yen, 1995), and teacher beliefs about Indigenous students (Chen et al., 1997). Generally, using surveys provided broad information regarding elementary teachers' beliefs and their relationship with teacher efficacy, behavior, and personal background. Nonetheless, the relationship between teachers' beliefs and teachers' actual classroom performance is still largely unknown. Corroboration of beliefs with interviews and observation can either validate the accuracy of teachers' beliefs or raise questions about contradictions between beliefs and practices.

A number of researchers have used qualitative research to explore the beliefs of teachers in Taiwan (see Fang, 2003; Hsiung, 2004; Jou, 1998; Lee, 2004; Liu, 2001; Wang, 2000; Weng, 2002; Wu, 2002) and teachers' practical knowledge (see Change, 2000; Hsieh, 2001; Lien, 2001; Shih, 2004; Wang, 2003). Their findings showed that what teachers believed and knew about the classroom social and instructional context influenced what they said and did in their classrooms. The research also illuminated more clearly the complex relationship between teachers' beliefs or knowledge and their practices. However, the studies focused on Han Chinese teachers of single subjects in the majority Han Chinese population areas. None of the studies provided detailed descriptions of teachers' beliefs, knowledge, and practices for teaching Indigenous students across different subjects in the context of a culturally diverse classroom.

Few studies have provided detailed analyses of how teachers' cultural beliefs and knowledge affect their teaching of Indigenous students (e.g., Chou, 2005; Chung, 2003; Lee, 2003; Lin, 2003; Liu, 2004; Wu, 2000). Those studies showed that teachers who were more aware of differences between Han and Indigenous students tended to take concrete pedagogical actions, such as caring for students and incorporating students' cultural experiences into the curriculum and instruction. Some teachers provided multiple instructional activities and materials, such as visualizing content by using films or pictures, and role-playing in order to meet diverse students' learning styles (Lin, 2003; Wu, 2000). Consequently, those instructional practices served to motivate Indigenous students to learn more and to better understand their cultures. Additionally, the studies revealed the factors that affect teachers' culturally

diverse teaching, such as the teachers' cultural background, teaching experience, education, and school contexts. However, none of that research selected exemplary teachers as subjects; neither was the research conducted across different school contexts of cultural diversity in order to understand exemplary teachers' expertise in teaching Indigenous students in various cultural contexts. In Taiwan there is a need for more field-based empirical research in both the personal history of exemplary teachers and in the context of cultural diversity.

### Conclusion

This chapter reviewed and analyzed three areas of theory and research: teacher beliefs, teacher knowledge, and teaching practices. The first section, "Teacher Beliefs and Knowledge," introduced teacher beliefs and knowledge regarding culture as correlated with practices. Studies showed that exemplary teachers held a positive perspective toward diversity and enacted a pedagogy that met diverse students' academic needs. Analysis also revealed that effective teachers had knowledge of their own cultural assumptions and of educational injustices. They also had knowledge of structuring curricula to create culturally relevant teaching for their diverse students. The second section, "Teaching Practices," provided the theoretical and empirical perspectives regarding strategies that teachers used to teach culturally diverse students. Those repertoires included scaffolding between the culture of the classroom and that of the students, caring for students' academic and social needs, and affirming students' different opinions and experiences. The combined perspectives of exemplary teacher beliefs, knowledge, and teaching practices have shed light on

various dimensions of the need for, meaning of, and approach to teaching students from socially and culturally diverse backgrounds.

The review also illuminated factors that affected teachers' beliefs, knowledge, and teaching practices. The factors consisted of the teachers' personal and contextual variables, such as cultural background, personal history, educational experience, the school's geographical location, and the school culture. Studies in that area also revealed that combining in-depth teacher interviews with observations in teachers' classrooms would validate the findings and provide for an in-depth understanding of the constraining and supportive factors in teachers' practices and school contexts.

The final section included surveys of Taiwanese research on teachers' beliefs, knowledge, and teaching practices. The objective has been to understand what is known and unknown about the research topic in order to explain the contribution this study makes to the field. Analysis of the findings from the research in Taiwan showed that some teachers, including both Han Chinese teachers and Indigenous teachers believed that Indigenous students were capable learners, were aware of the cultural differences between Han and Indigenous students, and incorporated students' cultural experiences into their curriculum and instruction. Analysis of the findings also revealed factors that influenced teachers' beliefs, knowledge, and teaching practices for Taiwanese Indigenous students, such as teachers' cultural backgrounds, teaching experience, teacher education, and school contexts. However, there were also some limitations in Taiwanese research. Compared to research on outstanding teachers' beliefs, knowledge, and methods of teaching the culturally diverse students in other countries, in Taiwan the domain of exemplary teaching for culturally diverse students

has not been targeted. Moreover, little empirical data are available to describe the variables in contexts ranging from urban to tribal areas. This study seeks to fill the gap by exploring the practices of exemplary teachers in a variety of cultural contexts, as well as tapping into the factors that affected their beliefs, knowledge, and practices for teaching Indigenous students.

## CHAPTER 3

### METHODOLOGY

The purpose of this study is to explore the beliefs, knowledge, and practices of exemplary teachers of Indigenous students in various cultural contexts. The research questions that frame the study are:

1. What beliefs and knowledge about teaching Indigenous students guide exemplary teachers?
2. What pedagogical practices are employed by exemplary teachers to address the educational needs of Indigenous students in various cultural contexts?
3. What personal or educational experiences of exemplary teachers shaped their teaching practices and rooted their beliefs and knowledge about teaching Indigenous students?
4. What contextual factors supported or constrained their work?

This chapter provides the methodological framework for this study. It includes descriptions of the research context and the selection of participating teachers. The procedures and methods used in this research are described in detail. Then, the data analysis and verification are elaborated upon.

#### The Methodological Framework

The nature of this kind of research—studying teachers’ practices—requires that the researcher participate in the participating teachers’ daily classroom lives to consider their actions in context. Studying teacher beliefs, knowledge, and experiences requires obtaining their reflective accounts of the thought processes and

the values that underpin their decisions and actions. It also requires teachers' reconstruction of pedagogical events and reasoning, as well as their articulation of experiences and school contexts that affect their teaching of diverse students. In other words, this study could not have been conducted without lengthy conversations with the teachers, contextual observations of their teaching, and access to their written reflections. Accordingly, this study uses an investigative approach that enables an in-depth examination of the exemplary teachers' methods of teaching Indigenous students in several contexts.

Qualitative case-study design best meets the purpose of this study since it offers a means of in-depth understanding of a limited number of subjects, their actions, and daily experiences, viewing the events in their natural setting (Bogdan & Biklen, 1998; Stake, 1995). It involves "researchers spending extended time, on site, personally in contact with activities and operations of the case, reflecting, revising meanings of what is going on" (Stake, 2000, p. 445). It allows the researcher to probe the complexities and processes of the participants' thoughts, feelings, and actions to gain an in-depth understanding of the situation and context (Stake, 1995; Yin, 1994). As Shulman (1986) pointed out,

Whereas cases themselves are reports of events or sequence of events the knowledge they represent is what makes them cases. The cases may be examples of specific instances of practice—detailed descriptions of how an instructional event occurred—complete with particulars of contexts, thoughts, and feelings. (p. 11)

Qualitative case study methodology is also useful in finding answers to "how" or "why" questions arising out of teachers' everyday practices (Yin, 1994). Its focus is "in the process rather than outcomes, in context rather than a specific variable, in

discovery rather than confirmation” (Merriam, 1998, p. 19). Given the lack of knowledge about exemplary teachers’ methods of teaching Indigenous students in Taiwan, the purpose of this research is to provide an empirically grounded examination of the main research questions. The research questions focus on teachers’ beliefs about, knowledge of, and approach to teaching Indigenous students and how the experiences and factors affect their teaching of culturally diverse students. This research seeks not to confirm hypotheses; rather, it strives to search out the contexts of the exemplary teachers’ lives in order to provide some evidence about their expertise and the factors that influence their work to contribute to the emerging literature in Taiwan.

The primary research methods used to gather data for this qualitative case study were interviews, observations, and document analyses. Interviews were used to elicit the teachers’ memories, knowledge, and beliefs about teaching Indigenous students. Observations were the basis of descriptions of teaching situations within the context of the classroom. Document analyses supplemented the interviews and observations. By adopting these methods to access the experiences of the exemplary practitioners, this study provides in-depth descriptions and detailed analysis of these cases. As Stake (1995) writes, these methods provide “episodes of nuance, the sequentiality of happenings in context, the wholeness of the individual” (p. xii). As such, this study aims to offer “a holistic and meaningful”(Yin, 1994, p. 3) understanding of the ways in which exemplary teachers related to their specific work contexts, and the ways in which the teachers responded in order to apply that expertise to teaching Indigenous students in various cultural contexts.



Notably, this study is not simply a single-case study; rather it is a “multi-case” study (Bogdan & Biklen, 1998, p. 62), involving three teachers in three different environments. Miles and Huberman (1994) stated that the purpose of the multi-case study is to

...increase generalizability, reassuring oneself that the events and processes in one well-described setting are not wholly idiosyncratic...seeing processes and outcomes that occur across many cases or sites, and understanding how such processes are bent by specific local contextual variations. (p. 157)

Hence, three exemplary teachers teaching in three different cultural contexts (urban city, near-city village, and Indigenous area) were selected for the study. Their beliefs, knowledge, and their teaching practices for Indigenous students were compared and contrasted, as were their experiences and the contextual factors that affected their teaching. By using cross-case analysis, this study attempts to find thematic similarities and differences among three teachers and settings. A focus on the collective evidence avoided the assumption that an exemplary teacher’s success is simply the result of an individual personality (Ladson-Billings, 1994). Moreover, commonalities and differences found among these exemplary teachers’ beliefs, knowledge, practices, and experiences help a consideration of the applicability of a model of effective teaching of Indigenous students in a variety of cultural contexts. The findings, in turn, should be useful for teacher preparation and professional development.

### Research Setting

Taiwanese elementary schools in Taitung County were selected as sites for this research for the three following reasons:

First, the researcher's personal and academic experience in Taiwanese elementary-school teaching provided familiarity with that context and allowed a focused addressing of the broader questions of teacher performance. In other words, experience in the elementary-school context provided ease of entry into the site. Therefore, data collection, analysis, and interpretation did not require time to adjust to an entirely new setting.

Second, Taitung County, located in southeast Taiwan and situated in an area bounded with ocean in front and mountains behind, is the most multicultural setting in that country (see Figure 3.1). At present, Taitung's total population is about 250,000. It is composed of three groups of Taiwanese Chinese<sup>3</sup>, Hoklo, Hakka, and Mainland Chinese<sup>4</sup>, and six different tribes of Indigenous Taiwanese: Paiwan, Puyuma, Rukai, Bunun, Ami, and Yami. The population of Indigenes in Taitung is about 79,000, making up about 32% of the total population in Taitung and about 18% of the total Indigenous population in Taiwan (Department of Statistics, 2004). With that mixture of different racial groups, Taitung provided substantial diversity in culture and ethnicity. Therefore, given the research purpose and questions, Taitung County emerged as a rich and appropriate location in which to conduct this research.

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<sup>3</sup> Early Chinese migrants to Taiwan arrived mainly from Fukien and Kwangtung (Canton) provinces. The Fukien Taiwanese came mostly from the southern part of Fukien province. Hakka Taiwanese came from Canton province.

<sup>4</sup> In 1949, the Communists defeated Nationalist Chinese armies on the Mainland and assumed political control of China, and 1.5 million Chinese immigrants reached Taiwan. Because they came from various parts of China, they were known simply as Mainlanders.



*Figure 3.1* Taiwan district distribution

Third, Taitung’s jurisdictional authority is composed of one city, two towns, and thirteen villages. Based on the geographical location, the administrative districts can be categorized by the following (see Figure 3.2):

- Islands – the villages of Lan Yu and Lu Tao
- Valleys – the villages of Tsisan, Luyeh, and Peinan; and the town of Kwanshan
- Coastland – the villages of Chang pin, Tungho, Taimali, and Tawu; the town of Cheng gong; and Taitung City.
- Mountains – the villages of Haituan, Yenpin, Gingfeng and Tajen



*Figure 3.2* Taitung district distribution. From Taitung government, Retrieved October 12, 2004, from <http://www.moi.gov.tw/stat/>

The tribes are clustered in different areas. The Ami tribe, having a population of about 44,000, is the largest tribe among the Indigenes in Taitung. They reside mainly along the longitudinal valleys and areas at the base of mountain ranges by two sides of the Coastal range. The Paiwan, with a population of about 14,000, is distributed mainly in Gingfeng, Tajen, Taimali, and Tawu villages. The Puyuma tribe numbered about 6,000. They live in the plains near the coast. The Bunun, having a population of about 8,000, is the typical resident in the highlands. The Rukai, having a population of about 1,500, is the smallest tribe of the six. The tribe lives mainly in Tajen village. The Yami tribe lives in Lan Yu (Orchid Island), with a population of about 2,700 (Taitung government, 2004).

Given such unique geographical and multicultural environments, the population of the elementary schools represents three culturally diverse distributions (see Figure 3.3). According to school-population statistics provided by the Taitung Education Bureau, there were 92 elementary schools in Taitung County: 21 in the city and 71 in towns and villages. Elementary schools in the city were larger than those in the outlying towns and villages. City schools had 15 or more classrooms, each of which had over 20 students, who were inter-mixed culturally. Most of the students were Han Chinese. Indigenous students were the minority. Three near-city areas, Tungho village, Peinan village, and Taimali village, had from 6 to 15 classrooms in each school and from 10 to 20 students per classroom. The students in those schools were also culturally inter-mixed. The rest of the towns and villages are in Indigenous areas with smaller school populations. On average, there were fewer than 10 classrooms in each school and fewer than 10 students in each classroom. Most of the students were Indigene. Given the unique school distribution afforded by the multicultural context itself, teachers for this study were selected from different areas, including elementary schools in the city, near-city village, and Indigenous area. By profiling the pedagogy of exemplary teachers from each area, this study contributes to a broader understanding of the contextual factors that affect teachers' work with culturally diverse students, especially Indigenous students.

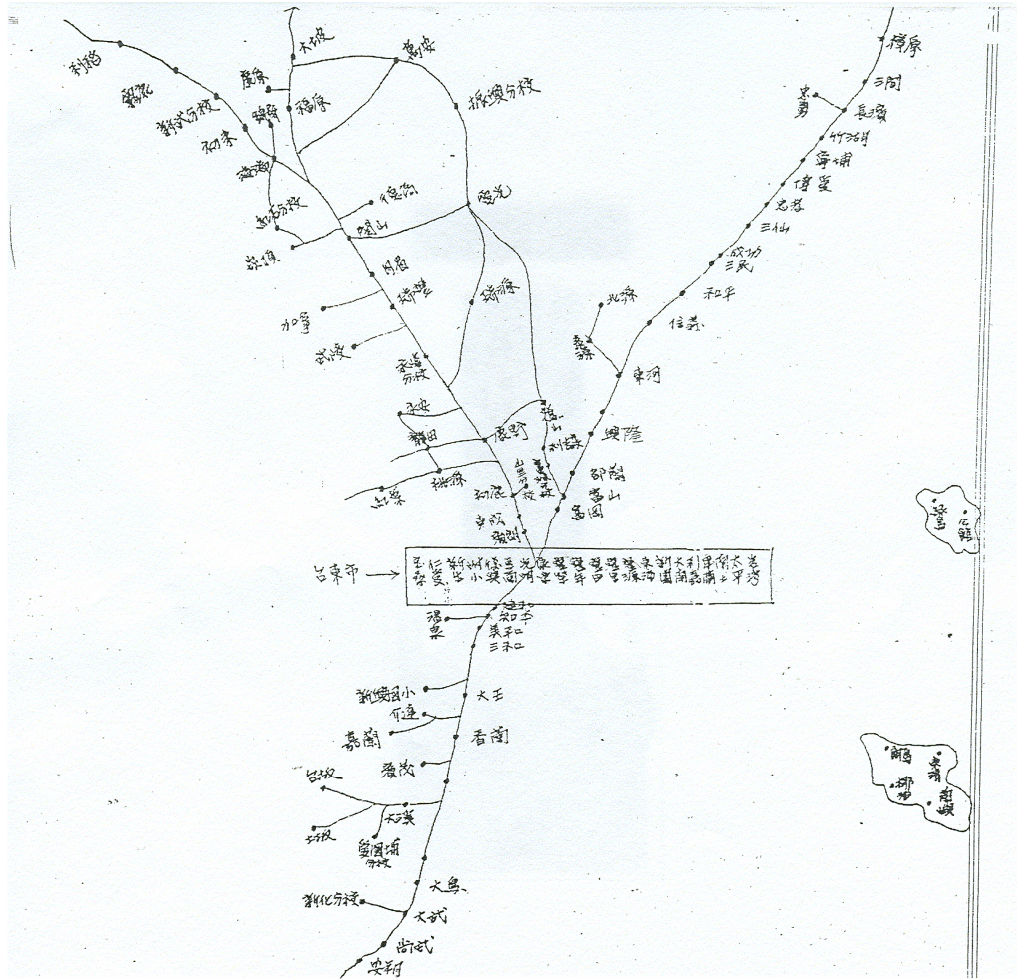


Figure 3.3 Taitung elementary school distribution. From Education Bureau of Taitung County, Retrieved October 20, 2004, from <http://www.boe.ttct.edu.tw/>

### Selection of Participants

Sought as study participants were exemplary elementary teachers instructing Indigenous students in culturally diverse contexts. The process of participant selection began with recommendations from informants who had knowledge of and had observed numerous classroom teachers. The informants included the

superintendent in the Taitung Education Bureau, faculty in Taitung University, and principals and administrators in Taitung elementary schools. By the nature of their jobs, they routinely observed teachers and suggested instruction improvements. They had access to many schools and classrooms, and they had considerable experience working with teachers. They were a valuable pool of information about exemplary teachers.

In February 2005, initial contacts were made with the superintendent in the Bureau of Education in Taitung County and four university faculty members who taught in the Department of Elementary Education in Taitung University. At meetings with them in their offices, each received a copy of the proposal for this study, of the university Institutional Review Board approval, and of a participant-nomination form (see Appendix A). The purpose of the study was explained and they were requested to recommend the teachers who they believed were most effective in teaching Indigenous children, and to provide the basis of their decisions. Discussing the meaning of *exemplary* provided fuller criteria for potential candidates. Their responses covered a wide range of domains, exploring both academic and social criteria, including success in raising students' achievement, devotion to Indigenous education, desire to serve students, design of curricula and instruction based on their understanding of Indigenous culture, and involvement with the Indigenous community. The advisors recommended eight teachers. In addition, some advisors could not recall names of some other deserving teachers—just their schools and principals. The advisors suggested visits with the principals and administrators in nine schools where exemplary teachers were believed to be assigned.

When contacted by telephone, one principal and one administrator refused to make a recommendation. One principal challenged the appropriateness of creating a hierarchy of teachers or a division between “good” ones and “bad” teachers. One administrator explained that teachers in her school were already involved in some research, causing fear of overburdening. Seven other schools were visited and presentations were made to their principals and administrators. Most of them decided that they had several teachers who qualified and met the explained conditions. In all, 13 nominations were offered. The nominated teachers were identified as successful by their principals and administrators for several reasons. Some were based on general observations about students’ achievement, such as “students really learn in her classroom,” “helps students achieve,” and “never gives up on students.” Comments about teachers’ instructional abilities included, “sees children’s differences and sets up plans for individualized instruction,” “provides varied cultural experiences for students,” and “continues learning and makes instructional improvement.” Comments about teachers’ relationships with students included, “cares about students,” “very involved with the students,” “students feel good with her,” “truly concerned about her students’ welfare,” and “provides a safe environment for students.” Comments relating to students’ parents and families included, “makes home visits,” “respects parents,” “parents have high regard for her as a teacher and an individual,” and “has good rapport with students and their parents.”

From all sources, a total of 21 nominations were received. Of that number, 11 were Indigenes (six females and five males); 10 were Han Chinese female teachers. The Han Chinese female teachers were selected as candidates because the researcher



was a Han Chinese female teacher. Having the same cultural background as the participants gave the researcher insights into their perspectives and experiences—a benefit to the project—and improved the probability that the teachers would be more comfortable in sharing information. That decision also minimized the likelihood of racial and gender differences among the participants, so that the effect of cultural context would be more adequately explored.

The ten recommended Han Chinese female teachers were stratified by their own demographics and school locations. Sought were candidates with at least five years' teaching experience, preferably with three or more years in her current position. Although experience does not guarantee expertise (Berliner, 2001; Sternberg & Horvath, 1995), teachers with more teaching experience are more likely to be mature and to better understand their work environment (Sprinthall, Reiman, & Thies-Sprinthall, 1996). One teacher was dropped from consideration because she had only four years' teaching experience.

Nine Han Chinese female candidates were telephoned. The study was explained and visits to their classrooms were arranged. One teacher declined participation because she disliked being observed. Another had become an administrator. Initial interviews and observations were scheduled with the seven remaining teachers. Each teacher was observed in her classroom for one class, and then interviewed for approximately 30 minutes. The purpose of the classroom visits was to observe the nominee's classroom composition and to determine whether they had supportive attitudes and strategies for teaching Indigenous students.

Three candidates were selected, based on interviews and observations, as well as demographic data. The three selected teachers were from different multicultural contexts; that is, Ms. Huang was from an Indigenous area, Ms. Chen from a near-city village, and Ms. Kao from Taitung City. They all believed that Indigenous students were unique and explained that they tried to accommodate the distinct needs of either Indigenous students or Han Chinese students. They demonstrated characteristics of effective teaching, such as providing various teaching strategies and activities for their students to learn. Their students seemed thoroughly engaged and interested in their work. They also showed a positive rapport with their students, who seemed very comfortable talking with them. Moreover, the teachers showed a passion to participate in the study, and they opened the doors of their classrooms. Ms. Huang appreciated that a researcher was willing to drive so far to conduct research in a mountainous area. She promised to do her best to cooperate with the study. Ms. Chen believed that participating in the research was an opportunity for her to learn more about her teaching and to improve her teaching. She appreciated the opportunity to cooperate. Ms. Kao was accustomed to having researchers in her classroom, as she had been involved with previous research projects. She welcomed the opportunity to learn more about teaching Indigenous students—a topic that had not been touched upon in previous research. A consent letter was given to each of them (see Appendix B). For ease of comparison, information about them is arrayed in the following table (see Table 3.1).

Table 3.1 Summary of Participants' Demographic Data

Name	School	Location	Race	Gender	Age	Y/T	TY	T/L
Ms. Huang	San Elementary School	Indigenous area	Han Chinese	Female	44	19	5	1 <sup>st</sup> Grade
Ms. Chen	Dream Elementary School	Near-city village	Han Chinese	Female	31	8	7	5 <sup>th</sup> Grade
Ms. Kao	Land Elementary School	City	Han Chinese	Female	42	16	11	5 <sup>th</sup> Grade

Y/T= Years of teaching. TY= Teaching years in current school. T/L= Teaching level.

### Data Sources

For the research project, the primary research methods of data gathering were: interviews, observations, and document analyses.

#### *Interviews*

Interviewing is an appropriate method to “gather descriptive data in the subjects’ own words so that the researcher can develop insights on how subjects interpret some piece of the world” (Bogdan & Biklen, 1998, p. 96). For this study, semi-structured interviews were conducted. That permitted probing the plausibility of emerging insights from the participants’ perspectives and experiences in teaching (Fontana & Frey, 2000). An interview protocol (Appendix C), which included open-ended questions related to the purposes of this study, was used to provide structure to the teacher interviews. The protocol allowed flexibility of the order and wording of the questions during the interview, as well as the opportunity to probe further or seek clarification of a response. The interview questions were based on a review of

published sources about teacher beliefs, knowledge, and practices for teaching culturally diverse students, and had been reviewed by American and Taiwanese experts in the areas of curriculum and instruction.

The interview process was developed in response to research questions. A first interview was designed to elicit information on exemplary teachers' backgrounds and schooling and to identify educational and personal experiences that may have motivated them and shaped their beliefs about, knowledge of, and approach to teaching Indigenous students in various cultural contexts. A second interview was designed to explore participants' beliefs and knowledge that brought practices. Topics discussed were: students' learning styles, class organization, lesson plans and goals, curricula and instruction, and interaction with students and their parents. A third interview was designed to determine the teachers' recognition of the contextual factors in their schools. The teachers were asked to describe factors that constrained or supported their work with students from culturally diverse backgrounds. They were also asked to recount in detail any actions they may have taken or thought about for improving their instructional skills and developing their professional abilities for teaching culturally diverse students. Each teacher was interviewed three times. Each interview lasted approximately one hour, was tape recorded, and transcribed verbatim before the next interview was conducted. That allowed the identification of items requiring clarification or elaboration.

#### *Classroom Observations*

Classroom observations afford researchers the opportunity to perceive and comprehend teachers' practices and contexts (Bogdan & Biklen, 1998). Observations

in this study focused on the implementation of curricula and instruction by the teacher; the interaction between the teacher and the Indigenous students; and specific aspects of classroom action, including Indigenous student behavior and the teachers' responses to Indigenous students. Prolonged and frequent observations were necessary to provide the sought after details. Observed was the teaching of two major subjects: Mandarin and mathematics. By observing the teaching of those subjects, this study discovered the teachers' practices in their classrooms and examined how teachers' perceptions of teaching Indigenous students affected their practices.

In order to not disturb the regular routine and activities in the classroom, the researcher was a non-participant observer, which required immersion into the context without interacting with those being observed (Angrosino & Mays de Perez, 2000). With the consent of the teachers, the classroom observations were audiotaped, to capture, without interrupting the class, the exact language used by the teacher and students. In other words, the observations were conducted in the natural settings of where the events occurred and where the teacher and the students were engaged, providing a deep insight into the phenomena under investigation.

More specifically, each forty-minute class session was audiotaped, with a wireless microphone attached to the teacher. Detailed descriptive field notes were taken as accurately as possible during classroom observations. The notes consisted of running descriptions of teaching methods and activities; interactions between the teacher and the Indigenous students; a description of the teacher's body language, movements, and facial expressions; as well as the classroom environment, which could not be captured on audiotape. The taped records were used to support and

clarify written records. Each participant's classroom was visited four days per week within two one-week periods. The total number of observations in each participant's classroom was eight days from March 2005 through June 2005.

Pre-observation questions were given to the teachers before each classroom observation. They were asked to respond to general questions about the lesson to be observed and about the unit in which the lesson was being taught. In a brief explanatory interview held after each classroom observation, the researcher inquired about what happened in the classroom, in order to understand and clarify the teacher's views and interpretations of her practices. The answers to the pre-observation and post-observation questions supplemented the data analysis. A copy of the questions is in Appendix D.

#### *Document Analyses*

The collection of documents fell into three categories that linked the research questions and the elements of the case being studied. These categories were: student information, samples of the teacher's work, and school information.

Each participating teacher provided a class profile showing demographic information about her Indigenous students and their family backgrounds. This profile showed the number of students, seating arrangement (to identify Indigenous students), achievement data, and a summary of the cultural or ethnic backgrounds of the students. Reports or letters to families were also included.

The second category of studied documents consisted of samples of the teacher's preparatory work, such as course syllabi, lesson plans, and reflective pieces. Those documents revealed significant information about the teacher's beliefs about

and knowledge of the subject matter, pedagogy, curriculum, and themselves. They also reflected the teacher's intentions or selected pedagogical strategies and instructional activities for teaching each subject to Indigenous students. Other collected documents included curriculum descriptions, textbooks, subject handbooks, resources and class materials, student assignments, and completed assessment forms. The documents contained essential information relating to the content of the formal curriculum, particular lessons that served to triangulate the observations, and field notes from class sessions.

The third category of documents consisted of contextual illustrations, including photographs of the classroom, which demonstrated the richness of the environment and showed how the teachers arranged their environments for student learning. Other documents contained information about the school location, calendars, newsletters, activity artifacts, school policy, and photographs of the school environment showed the context of the teachers' work.

All three types of documents were read, coded, and analyzed for themes that related to the beliefs, knowledge, practices, experiences, and contextual factors that affected the teaching of Indigenous students. The documents were also helpful in interviews, serving as a basis for discussing teacher decisions and for pursuing interpretations in order to gain a deep understanding of the explicit and implicit purposes and meanings.

#### Data Management and Analysis

The major data sources in this study were the interview transcripts, supplemented by field notes from observations and documents about instructional

practices and school contexts. Each interview was structured around the teacher's responses to the stories, questions, and insights generated by the previous interviews, observations, field notes, and document analyses. The teachers were assured that their remarks would be reported accurately. The researcher transcribed the tape recording and each set of field notes immediately after the related session. The first set of transcripts was reread alongside the observation notes and personal notes before engaging in the second interview and observation, which enabled the identification of areas of inquiry and clarification for the subsequent interviews in light of emergent themes. All data sources needed to be translated from Chinese to English, which was done by the bilingual researcher. To increase the comfort level of participants and respect their privacy, the researcher used pseudonyms for the sites and subjects. All the data were compiled chronologically in separate files for each participant and all data sources were kept confidential as well.

Data analysis is a systematic process of studying and organizing interview transcripts and other documents collected to supplement the researcher's understanding of findings, as well as the presentation of the findings to others (Bogdan & Biklen, 1998; Schensul & LeCompte, 1999). Grounded theory provides a useful analytic approach: a rigorous procedure of data analysis by which the researcher continuously compares and contrasts the data, in order to develop an inductively derived theory from the data (Strauss & Corbin 1998). In this study, the data analysis followed grounded theory procedures to present the exemplary teachers' beliefs, knowledge, and practices; to identify factors that foster their expertise; and to document the expertise in teaching Indigenous students—the similarities and the



differences. The transcribed interviews and field notes were analyzed in the continuous comparative method of grounded theory, involving reading and coding data, identifying patterns and themes, and then maintaining or modifying assertions. These patterns were then compared to constructs from the literature on culturally relevant teaching and critical pedagogy.

The analysis process can be facilitated by computer software for making notes, editing, coding, and storing the database; searching and retrieving; data linking; analyzing content; displaying data; and graphic mapping (Weitzman, 2000). This study utilized the computer software, NVIVO, to manage and analyze the data throughout the research process. The coding process included within-case and cross-case analysis.

For the within-case analysis, each individual participant's data set, such as the transcribed interviews, field notes, and documents were analyzed, using the process of open coding, an analytic process for naming concepts, defining categories, and developing categories in terms of their properties and dimensions (Strauss & Corbin 1998). The open coding was performed for various ranges: line-by-line, whole sentences, paragraphs, and the whole document. Concepts and categories were identified by using the research questions as a guide. For example, categories for Ms. Huang's teaching practices included the following: adapting teaching to students' needs, setting high expectations while taking individual differences into account, guiding students' behavior, building trust in teacher-parent relationships, building caring relationships with students, creating a home-like classroom, designing school-based curricula and instruction, making real-world connections, and reflecting on

instruction.

As coding categories emerged, axial coding was used to consistently compare the categories to find relationships and differences among them and to reassemble data by relating categories to their subcategories (Strauss & Corbin, 1998). For example, teachers' illustrations of "factors influencing their culturally diverse teaching" emerged as an initial category. The category was divided into two subcategories, "supporting factors" and "constraining factors". Each category had been developed from smaller categories. For example, among the sub-categories encompassed by the term "constraining factors" were: time constraints, school culture, and school policy. The categories were continually examined, based on the data collected from observations, interviews, and documents so that analysis was grounded in the contexts of the teachers' lives (Strauss & Corbin, 1998).

In the final stage of within-case analysis, the categories for the individual participants were clustered into the central themes, which included teacher background, the education of Indigenous students, curriculum and instruction, and Indigenous family relations. The codes and analytical categories were carefully maintained while developing and writing each narrative in accordance with the central themes.

After separately coding for each participating teacher, a cross-case analysis was performed, making comparisons to identify common trends and differences among the cases. Selective coding was used for cross-case analysis, which involved integrating and refining the data (Strauss & Corbin, 1998). During that process, the categories and themes for individual participants were examined for patterns

representing synthesis categories across the three cases. For example, the synthesis categories in the theme of teaching practices were: self-confidence and commitment, differentiated expectations, cultural pedagogy, character development, and an ethic of care. Next, all the previous data for each teacher were reviewed at least twice, using these synthesis categories to determine if any additional data might contribute to the cross-case analysis. As the data were read and reread, there was a simultaneous search for thematic similarities and differences to concepts dominant in the literature of effective teaching of culturally diverse students, such as culturally relevant teaching and critical pedagogy. Finally, assertions were made relative to teachers' practices and their guided beliefs and knowledge in various cultural contexts, as well as the experiences and contextual factors that affect their teaching for culturally diverse students.

#### Subjectivity and Data Verification

As a teacher and a graduate student, my own set of experiences and knowledge not only facilitated my study of the teachers' classrooms, but also served as a tool to see beyond what was shared and observed. While my practical and academic experiences provided me with a level of familiarity with the phenomenon under investigation, they might also have prejudiced my perspective in the process of gathering, analyzing, and interpreting data. For example, one of the Indigenous students in Ms. Kao's classroom answered her questions extra loudly and could not sit still. I did not agree with Ms. Kao's teaching style and believed that an effective teacher would have had better control of students' behavior. I was aware of my stance on Ms. Kao's teaching when I wrote my feelings about the event. To prevent my

subjective judgment from skewing my study, I asked Ms. Kao to explain why she had handled the situation as she had. I discovered that she had acted purposefully, in a manner beyond my experience. She understood the Indigenous student's cultural background and believed that it was too harsh to ask an Indigenous student who came from a tribe to follow the regulations of the city school. She accepted her Indigenous student's individuality and allowed him to learn in the way that was most comfortable for him.

For conducting qualitative research, Peshkin (1988) believed that developing a reflexive awareness of our subjectivity contributed to enhancing the quality of our interpretations. The above example showed that I had to identify the biases that might affect my inquiry. I tried to take precautions to manage or avoid bias. Specifically, I used strategies recommended by other researchers (Creswell & Miller, 2000; Lincoln & Guba, 1985; Stake, 2000; Vockell & Asher, 1995) as effective ways to reduce subjectivity and increase the validity of the study. The strategies, discussed below, included prolonged engagement and reflection, triangulation, peer debriefing, and member checking.

First, I spent sufficient time at the research site to ensure persistent involvement of the participants over a prolonged time frame to understand the reality of classroom life. As Creswell and Miller (2000) suggest, prolonged participation in the field can help researchers better understand the context of participant views. It also can provide researchers with the opportunity to examine their biases and predispositions by verifying the observation and interview data. To accomplish this, I spent over four months as an observer to learn the context, and I recorded valuable descriptions of

events, conversations, and interactions that took place in the classrooms, as well as information about the environment. Additionally, I recorded my own feelings about those happenings and the atmosphere that permeated the classrooms, all the better to crystallize my thoughts during data gathering. I also recorded questions that came to mind and issues that seemed particularly important and needed to be investigated further and pursued them.

Next, I used the method of triangulation to improve the validity of the findings and interpretations. Stake (2000) suggested, “Triangulation has been generally considered a process of using multiple perceptions to clarify meaning, verifying the repeatability of an observation or interpretation” (p. 443). That method of triangulation, as Creswell (2002) stated, “ensures that the study will be accurate because the information is not drawn from a single source, individual, or process of data collection. In this way, it encourages the researcher to develop a report that is both accurate and credible” (p. 280). Accordingly, I triangulated data by looking for patterns and themes in the information gained from different methods and sources, including audiotaped interviews, observations, and document analyses. Observations and document analyses can not only provide a detailed description of the teachers’ practices, but can also check the consistency and inconsistencies of information generated by the interview transcripts. Moreover, classroom observations, interviews, and document analyses provided additional evidence that was necessary for a complete understanding of the realities of the classroom so as to not bias conclusions by focusing on only one data source. In other words, interviews that are substantiated by field observations and documents can verify the validity of each phenomenon as it

was presented and reduce the probability of misinterpretation, thereby improving the credibility and reliability of the findings.

Third, I used peer debriefing to review data and interpretations. Peer debriefing is defined by Lincoln and Guba (1985) as “ a process of exposing oneself to a disinterested peer in a manner paralleling an analytic session and for the purpose of exploring aspects of the inquiry that might otherwise remain only implicit within the inquirer’s mind” (p. 308). In this study, one Han Chinese elementary teacher, who has teaching experience with Indigenous students, and one Indigenous elementary teacher took the role of peer debriefers. It was hoped that the debriefers’ academic and practical experiences provided different perspectives and increased the validity of the data analysis in this study. The two debriefers were asked to read the transcripts and examine the coding themes and categories that I devised, as well as various interpretations of the data. Any discrepancies in the coding or interpretation were discussed until an agreement was reached. Peer debriefers provided a different cultural perspective for viewing the data. Their responses suggested that the teachers had some unquestioned assumptions about Indigenous students’ backgrounds. Their comments challenged me to consider teachers’ lack of cultural awareness more critically. That was reflected in the discussion of the findings.

Finally, *member-checks* were conducted—an effective strategy according to Vockell and Asher (1995)—affording the participants an opportunity to respond to the researcher’s recounting of situations and to clarify any uncertainties or inaccuracies. The study, of course, discussed field notes and transcriptions of interviews with the participating teachers in order to incorporate their perceptions and

reactions. Each participant was given a copy of the transcripts of her interviews and asked to review it for errors. Also, the draft study was sent to each participant, giving them the opportunity to review how their work was portrayed and to clarify any ambiguities. They were asked to examine the analyses in order to ensure accuracy. The value of their perceptions and reactions was expressed, with assurance that their reactions would be included in this dissertation. Ms. Kao expressed satisfaction of the analyses and pointed out the combination of teaching practice, curriculum and instruction, and relationships with parents and students were excellent topics on which to focus. Ms. Huang also considered the research fair and expressed appreciation for the researcher's efforts. She suggested one modification about using food as a reward for students' behavior modification: she believed that it was an effective strategy for changing the behavior of her Indigenous students, as they were in desperate need of food. However, she acknowledged that she would not use this strategy for the long term. Rather, she would gradually reduce extrinsic rewards and introduce intrinsic rewards in the next semester. Ms. Chen said that the analyses were on target and well organized, which actually helped her understand her beliefs and her teaching methods more clearly. She also announced the suspension of her differentiated reading groups and reported that the groups would continue in the upcoming semester, rather than being discontinued. After the participants' comments were reviewed, the analyses were revised, taking advantage of the clarifications and suggestions received.

## Conclusion

This chapter explained the methodology of data collection and analysis used in this study. Case-study research was conducted to explore the teaching of three Han Chinese female teachers who were identified by school officials as successful teachers of Indigenous students in three different communities—an Indigenous area, a near-city school, and a city school. Data collection consisted of interviews, observations, and document analyses, which were studied and interpreted, using an inductive approach. Subjectivity was monitored by increasing the validity of the data through prolonged on-site engagement and reflection, triangulation, peer debriefing, and member checking. What follows, in Chapter Four through Chapter Six, are details of the research and of the participating teachers, as well as interpretation of the data.



## CHAPTER 4

### MS. HUANG

The subject of this chapter is Ms. Huang, a teacher in an Indigenous school. The findings in this chapter are organized into four sections: (1) Background and teaching context, (2) The education of Indigenous students, (3) Curriculum and instruction, and (4) Indigenous family relations. The first section provides educational and professional context. An understanding of the teacher in the setting will provide a context to answer the research question. Section two through four describe Ms. Huang's beliefs about and knowledge of the learning and teaching of Indigenous students, the curriculum and instruction, and the Indigenous parents and family. Ms. Huang's teaching practices, which were guided by her beliefs and knowledge regarding these issues, are reinforced. Moreover, Ms. Huang's perceptions of experiences or factors that influenced her beliefs, knowledge, and practices are included in each section. Finally, each section concludes with a summary of the findings.

#### Background and Teaching Context

This section covers Ms. Huang's personal and educational background, as well as the context in which she taught. It begins with Ms. Huang's personal and educational experiences, such as her family, her student years, her decision to become a teacher, and her preparation for teaching Indigenous children. It continues by introducing the school context in which Ms. Huang taught. The school environment, demographic data, the school culture, and school policies are covered. This section

ends by introducing the classroom setting where Ms. Huang and her students interacted. Student data, teacher schedules, and the classroom arrangement are presented.

### *Teacher Background*

Ms. Huang, a Han Chinese woman in her mid-40s, was born and grew up in a rural town, Y-Lian, in Kaochiung County, western Taiwan. Her grandparents were farmers. Her father was an engineer and her mother helped with his business. Ms. Huang had four siblings. She described her family as close-knit. They met regularly on holidays and family days. Intimate family bonds have been the strongholds of her life. Ms. Huang said of her family, “When I encounter difficulties in my life, they will always be by my side and give me support. I really appreciate having a wonderful family.”

Of her experiences in grade school in Y-Lian, Ms. Huang said that she was an excellent student and was many teachers’ favorite student. However, when she was in junior high school, a misunderstanding with her teacher had a negative and long-lasting effect on her school career and life. Her teacher accused her of cheating on a test. Ms. Huang said that she had nothing to do with it, but the teacher would not listen to her. As a result, she lost the trust of her teacher and her classmates. From then on, she became withdrawn and refused to learn. She gave up on herself. Her grades went down to the very bottom.

According to Ms. Huang, because of her low grades, she could not get into her most preferred school, the teachers college. Instead, she studied at an Agricultural Junior College in Ja-Yi County. Her major field was the Art of Agriculture. Sadly, it

was not her interest and she characterized the experience as wasted years. Upon graduating, she did not know what career to pursue. Her father provided her with three career options: work in the local bank, work for the government, or become a substitute in the elementary school. The last was the most desirable because teaching was her original goal. Having a passion for children, she chose to become a substitute, although she realized that it “had the lowest pay and was unsteady.”

Ms. Huang taught as a full-time substitute elementary-school teacher in different localities. She so much enjoyed teaching that she decided to become a “real” teacher. Preparing for and taking the entrance examination for the teachers college was the first step. Unfortunately, she failed the first time and felt very frustrated. She resumed work as a substitute. She got married and had two children. Her husband asked her to leave teaching and help him run his business. However, Ms. Huang said that teaching was her favorite job, and that she would never quit. Because of her love of teaching, she decided to work harder in order to pass the teachers-college examination. After the school day, she went to “cram school” to prepare for the entrance examination. She studied long into the night-sometimes until 4:00 a.m. “It was the most difficult time in my life. I told myself that I must endure because I knew that it was my goal to get into teachers college. It was my dream to be a real teacher.”

Ms. Huang was rewarded for her hard work. She passed the examination and entered Taitung Teachers College. Her major field was Elementary School Education and her minor field was Educational Counseling. Upon graduation, she received a bachelor’s degree in Education with a concentration in counseling. After graduation she was assigned to an Indigenous school in Taitung.

Ms. Huang indicated that during her teacher education program she did not receive any education or training specific to teaching Indigenous students. Therefore, she suffered “culture shock” and had a very difficult first year when she taught at the rural Indigenous school. She found that Indigenous students acted differently from the Han Chinese students she was accustomed to. She did not know how to reach them and raise their levels of achievement. Moreover, she could not tolerate Indigenous parents’ indifference toward education. She did not know how to communicate with parents, either. Consequently, she considered resigning but decided to keep trying. She described her personality, “I have patience and persistence. I don’t want to quit when I encounter difficulties. I would like to keep trying and see how thing works out.”

Over the years, Ms. Huang sought out opportunities to educate herself about teaching Indigenous students. However, there were few professional development opportunities that met her needs. Of necessity, she relied most on reflecting and modifying her teaching style by trial and error. She explained, “If whatever I’m doing doesn’t seem to work, I try something else. I’m always learning, always changing. The process is always going on.”

At the time of this study, Ms. Huang has been teaching for nineteen years at various grade levels. She had been a classroom teacher for most of her teaching career. She had taught in Indigenous schools for nine years, and had been a faculty member at her current school, San Elementary School, for five years.

Asked why she remained teaching in the Indigenous community, Ms. Huang replied,

I've thought about my own teaching more deeply and I realized there are a lot of things that I do coming from my love of my students. Because of love, you'll devote your time and energy for them. You'll search ways to improve your instruction in order to help your students. It also came from my accountability as a teacher. You just can't let go when you see they're suffering in learning. You don't want to give up any one of them. But most of all, the children need me. I feel that I can make a difference in their lives.

Teaching Indigenous students was a rewarding experience; it made her feel needed, and she realized that she could improve students' lives. As Ms. Huang summed it up, "It is the true meaning as a teacher."

### *The School Context*

San Elementary School is located in the mountains, near a remote Indigenous tribe, far from Taitung City. Although the school is small, it is on a large plot of land, 18840 square meters. The school is a U-shaped, two-story building housing both the administrative offices and the classrooms. Two woodcarvings of Indigenous farmers are displayed in the lobby. One is a man holding a tuft of millet; the other, a woman carrying a basket of millet. According to Ms. Huang, the two figures were given by a tribal woodcarving master, who taught students the craft last semester. In display cases in the lobby are students' art works. Outside, on the left side of the building, is a small yard, where millet is planted. Behind the building is an athletic field with a broad view of open sky and grassy area. It is a spacious, flat square for running and playing baseball. Beside the field are wooden climbing equipment and outdoor facilities.

San Elementary School contains the first through the sixth grades. For each grade there is one classroom for seven to ten students and one teacher. For the school year 2004-2005, the school's enrollment was 51 students. All the students are

Indigenous students from the Bunun tribe, except for one Han Chinese student.

According to the principal, the families living in the tribe are primarily working class and lower income. Many parents work outside the tribe as lower-echelon workers or are unemployed. Grandparents or a single parent raise most of the students.

The faculty and support staff totals thirteen: one principal, two directors, one nurse, two support staff, and seven certificated teachers. Among the teachers, one is Indigenous and six are Han Chinese. Because the school is small, everyone knows each other. However, according to Ms. Huang, knowing each other does not translate to cohesiveness and cooperation among colleagues. Instead, it fosters a climate of mediocrity, which Ms. Huang explained as follows, “It is required that everyone be on the same page. Individual excellence does not please other teachers.” For example, Ms. Huang said that she would like to use a portfolio record system, making notes of children’s breakthrough accomplishments. Although the principal respected and welcomed the innovation, other teachers had differing opinions. Ms. Huang said, “Some teachers feel what I’m doing is making them look bad. Others feel pressure and fear it might burden their work.” Ms. Huang felt constrained by the school’s climate of mediocrity. She wanted to improve her teaching, but she had to conform with the school context. She explained, “You’re not playing your own game. You have to follow the rules of the school team.” Under the circumstances, Ms. Huang said that she had to adjust her practices. In her classroom she was free of peer pressure, but for activities involving other teachers, she acted according to the expectations of her colleagues.

Ms. Huang pointed out that with a small staff, every teacher had to take on administrative responsibilities in addition to teaching. For example, besides being the first-grade teacher, she was the guidance counselor. Her counseling duties were: to schedule referred students through individual or group counseling, to attend training sessions for counseling, to teach Life Education and Gender Education to all students, to hold school-wide parent conferences, and to deal with other relevant matters referred from the principal and directors. Given the curricular constraints from the board of education, Ms. Huang had to do much of her administrative work whenever it would not affect her classroom duties; that is, during students' naptimes, after classes were dismissed, or at night. The overload distressed her terribly. She expressed fear that she was going to burn out from the day-to-day demands and stress.

The Department of Education had qualified San Elementary School as an Educational Priority Area School (EPAS). The EPAS system was designed to provide supplementary budgetary support for schools with Indigenous students or low-income households. With that aid, according to the principal, the school had sufficient teaching and learning resources, such as a computer and a television set in each classroom, books for the school library, a free lunch for each student, and materials for instructional needs. Most of the budget, according to Ms. Huang, was allocated for the after-school program and instruction related to Indigenous culture.

The after-school program was mandated by the Department of Education to support students' academic development. In San Elementary School the program was designed mainly for lower-achieving first- and second-grade students. Schedules

included long work periods after school to provide students and teachers with enough time to do remedial work, particularly teaching the basic skills: reading, writing, and arithmetic. In the higher grades the funds were used to hire specialists from the community to teach traditional arts and crafts. Woodcarving was taught the previous year; Indigenous traditional dance was the current year's focus. Time was reserved on Wednesday afternoons for students to learn dancing from a specialist.

In addition to EPAS funds, another effort made by the school in support of Indigenous culture was the development of a so-called school-based curriculum. It was designed to implement the policy of school-based management. The Department of Education authorized local school boards to develop their own curricula to best fit the needs of local communities. Given that the majority of the population belonged to the Bunun tribe, the curriculum in the San Elementary School was designed to focus on the Bunun culture. The curriculum and instruction were designed and implemented by teachers. The goal was to preserve Indigenous cultural heritage by giving students the opportunity to discover the history and culture of their ancestors.

### *The Classroom Context*

Ms. Huang's first-grade class consisted of ten Indigenous students: four males and six females—all from the Bunun tribe. Three were from single-parent families, and two were being raised by their grandparents. Most of them lived in housing complexes for lower socioeconomic families.

Ms. Huang's classroom instruction began at 8:30 a.m. and continued until noon. She taught the major subjects: Chinese, mathematics, the life curriculum<sup>5</sup>,

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<sup>5</sup> The Life Curriculum integrated social studies, arts and humanities, and science and technology for the first and second grades (Taiwan Ministry of Education, 2006b).



health and physical education, and the flexible curriculum<sup>6</sup>. Because of the students' low achievement, and with the agreement of their parents, Ms. Huang had the entire class stay until 4:00 p.m. in the after-school program.

Ms. Huang's classroom was located on the first floor, on the right side of the school building. It was large, bright, and square, with large windows on two sides of the room. Along the wall immediately to the left of the door was a desk on which students' portfolios were displayed. Each portfolio included basic student information, along with photographs and schoolwork. The portfolios were meant to provide a progress record for the use of teachers who would subsequently teach her students. Ms. Huang hoped that other teachers would add to the portfolios so that, upon graduation, the students could have their own historical souvenirs of their elementary-school years.

A blackboard stretched across the front of the room and a radio sat on the floor under the blackboard. When students wrote, painted, or napped, Ms. Huang always tuned the radio to music or story-telling. She said, "Students are too agitated. Playing music and stories can help calm their minds."

The right wall was lined with a computer, a TV set, and the teacher's desk. Ms. Huang used the computer to show stories from the Internet. Sometimes, when the children did not want to take a nap, she allowed them to watch cartoons on TV. The desk used by Ms. Huang to direct the students' work was neat and well organized.

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<sup>6</sup> The flexible curriculum, which took 20% of classroom sessions, was designed for the flexible use of schools and teachers. For example, schools could use the time to develop school-based activities that met the needs of the school. Teachers could use it to prepare curricula and teaching materials or tend to the needs of students, such as individual instruction and remediation (Taiwan Ministry of Education, 2006b)

The seating arrangement changed from time to time. On my first visit to the classroom, the ten wooden desks were divided into two equal groups in the center of the room. Ms. Huang used that arrangement for group discussions and collaborations. By design, she assigned higher-achieving students to sit with and help lower achievers. After one month, when I returned to the classroom, the arrangement had been changed: two lines of desks were facing the blackboard. Ms. Huang used that arrangement for tests. After the examination, seats were arranged in an inverted-U shape, which Ms. Huang said worked best for interaction between the teacher and the students. She explained, “I can see each child and go around to each child to inspect his or her work. Each child can see me without any difficulty as well.”

The other one-third of the classroom was an open, multi-colored, carpeted area, furnished with two small wooden tables. Wooden bookshelves were arranged in a U-shape, outlining a carpeted area. On the left side, the bookshelves were full of books. The shelves at the back contained pillows and blankets. To the right were toy animals, toy trucks, and other supplies. The area, according to Ms. Huang, was designed by the teacher and students. Students’ involvement in setting up this area made them feel more at home. Otherwise, Ms. Huang said, “If I were the one who made all the decisions, they would not appreciate it.”

The carpeted area had multiple purposes. Sometimes Ms. Huang and the students used it to play games. For example, when Ms. Huang taught the mathematics unit, Knowing the Calendar, she and the students sat in a circle to play month-counting. At other times, Ms. Huang had students work in groups at two tables in the carpeted area. She said that the purpose of having the activities in that area was to

make learning more fun during instruction. Ms. Huang stated that sometimes “students who complete the required work earlier come here. They can play and read according to their individual needs and interests.” Also, children slept on the carpets every day during naptime. “They have after-school courses. In order to give them the energy to continue the afternoon activities, I often ask them to take a long nap until 2 o’clock.”

On the top of the back bookshelves was a tuft of dried millet. It was used for one of the units in the school-based curriculum, designed to help familiarize the students with millet, the traditional food of the Bunun tribe. Above the back bookshelves were bulletin-board displays of students’ work, along with classroom regulations. According to the classroom rules, students were required to raise their hands for permission to speak, talk one at a time, focus during the class, respect others, be kind with their words and actions, and use good manners in the classroom. On the first day of school Ms. Huang acted as a facilitator by creating activities in which the students devised their own classroom regulations. Giving students a voice in the decision-making process was her effective way to establish and maintain order. Having a role in setting the rules and the consequences for non-compliance, the students knew the predictable outcomes of misconduct, and they took responsibility for proper classroom conduct.

### *Summary*

This section covered Ms. Huang’s personal history and educational background, as well as her teaching environment. Having a strong desired to teach and persisting to become a teacher, Ms. Huang was eventually rewarded. Her affection for her

students and her dedication to teach Indigenous students were obvious. Moreover, she believed in her ability to make a difference in her students' lives. That, in turn, gave her the rewarding feeling of being needed, as well as a sense of accomplishment. She pointed out, however, that the lack of preparation in teacher education and professional-development programs made her rely upon herself to learn how to teach Indigenous children and to improve her teaching skills by reflecting on her effectiveness.

Identifying Ms. Huang's school context required an examination of the school environment, demographic data, school culture, and school policies. In Ms. Huang's view, the school had a culture of mediocrity that hindered expectations for excellence in the system. In addition, because of the limitations of human resources, each teacher had to take a heavy administrative workload, which made Ms. Huang feel stress and burn out. The school did, however, receive budgetary support from EPAS, which was used on after-school care programs for lower-achieving students at the primary grade level and teaching Indigenous arts and crafts at the higher-grade levels. The school also developed a school-based curriculum, designed by teachers, to facilitate the substantial development of Bunun culture.

Finally, the description of Ms. Huang's classroom setting involved student data, teacher schedule, and classroom arrangement. Ms. Huang's classroom, in particular, was a home-like family. Each corner and arrangement in the classroom expressed Ms. Huang's consideration of her students' needs. Moreover, Ms. Huang gave students ownership to design their favorite place and devise classroom regulations. Giving students a right in the decision-making process, Ms. Huang

believed, helped students appreciate the learning environment as well as take their own responsibility in the classroom.

### The Education of Indigenous Students

Three themes can be drawn from Ms. Huang's beliefs and knowledge about educating Indigenous children and her efforts on behalf of that cause. The themes are: adapt teaching to students' learning needs, believe in their learning ability, and guide their behavior. Also covered in this section are the experiences and events that affected Ms. Huang's beliefs, knowledge, and practices.

#### *Adapt Teaching to Students' Learning Needs*

Ms. Huang had taught at other grade levels in different schools. Her experience convinced her that each student at each grade level and at each school is different. Learning about students as individuals was one of her major skills and pursuits. To accommodate students' individual differences, she employed student-centered teaching—that is, her teaching was customized to fulfill the teacher's understanding of the students' needs.

More specially, Ms. Huang stated that she always put the child at the center of her teaching. That is, she considered what content her students might be interested in, which learning activities they might enjoy, and what materials would best facilitate their learning. She considered students' needs to discover the appropriate approach for each individual student. Ms. Huang explained that having students' interests, weaknesses, and strengths in mind was the key to a teaching philosophy that meets students' needs.

In particular, Ms. Huang observed that many Indigenous students were very animated and needed much kinetic activity. However, if instructional activities were “teacher-centered, teacher-voiced, and centered on paper work”, they became “unfocused, unmotivated, and poor in self-control.”

Ms. Huang pointed that, to accommodate her students’ learning styles and behavior, “traditional teaching, teacher talk, students sitting and listening, could not fit Indigenous students.” To discover students’ learning styles, teachers had to allow more individual response and active learning. Ms. Huang tried to teach in a way that was compatible with her students’ learning styles and needs. When she taught the arithmetic unit, Measure of Length, for example, she designed outdoor instructional activities employing her students’ movement-oriented learning style and interest in play.

To teach students the concept of measuring length, Ms. Huang took her students out of the classroom to the trees near the athletics field. She asked them to pick up a leaf and think about how to measure it. The students, excited, ran to the trees to pick up the leaves. When they found a leaf, they squatted on the ground and discussed it. Ms. Huang checked each student’s activity. She walked up to Zu and shouted out, “I found one who can do it. Zu, would you like to share with us how you do it?” Zu smiled as she explained her method. She put the leaf on the ground and used her hands to draw lines on each side of the leaf. Ms. Huang praised Zu for her quick mind and asked everyone to applaud. Zu kept smiling while everyone applauded her.

During recess, Ms. Huang explained her reasons for designing such instructional activities. She said that Indigenous students had a history of living in the mountains, close to nature. Outdoor activities were more likely to engage them in learning. Zu was an obvious example. According to Ms. Huang, Zu was the slowest learner in the class. Her performance was below grade level. Ms. Huang described her background and her learning difficulties in school:

Zu is being raised by her grandparents. Her grandparents do not know how to teach Zu. When home with her tribe, Zu is allowed to play all the time. As a result, she found it very painful to come to school during the first few weeks. School was a place where she was constrained and where she had lost her freedom. She could not focus on schoolwork or sit in the chair for too long. She complained that she disliked school and wanted to go home.

Ms. Huang made a considerable effort to help Zu like school. She discovered that traditional classroom communication could not capture and hold Zu's attention; so, she designed some outdoor activities to make Zu feel as comfortable as she would be with the tribe. In that day's lesson, Ms. Huang discovered that Zu was uncharacteristically focused on learning. Ms. Huang described her excitement at seeing Zu find and describe a method for measuring a leaf. That level of performance, Ms. Huang said, she had never seen in the classroom, and she grasped the opportunity to encourage her. Ms. Huang affirmed, "Zu is not stupid. She can learn. Learning from nature might be the best way to reach her."

In summary, Ms. Huang modified her methods to incorporate movement and games with her students, because she knew they loved to move and play outdoors. As a result, not only her students' enjoyment and learning increased, so also did their interest and self confidence in learning.

### *Believe in Students' Learning Ability*

Ms. Huang pointed out that most Indigenous students suffered economic and domestic disadvantages, as well as the low-test scores. Consequently, many Indigenous children considered themselves stupid, and they easily gave up on learning. Also, many teachers had low expectations for them. Ms. Huang was not discouraged by those realities. She did not share other teachers' beliefs that Indigenous students had low potential to learn. Ms. Huang declared, "Indigenous students not only are capable of learning, but also they are creative and bright." She made sure that her students understood her position:

I try to get these children to believe that they are intelligent. I want them to believe that they can do things, see themselves as competent people... I told my students to make an effort at what you're good at. You may not be doing it now, but that doesn't mean that you can't be better in the future. You have limitless possibilities. Once you make an effort, your development is boundless.

Under Ms. Huang's tutelage her students believed in themselves, and she encouraged them to open themselves up to new academic challenges. She prioritized the needs of the students, focusing upon their academic successes, security, and affirmation of themselves. Her assuredness and high expectations showed in other facets of her instruction.

For example, when teaching words in Chinese-language units, Ms. Huang attached the word cards to the blackboard. She called on students to say one of the words and find it on the blackboard. Ms. Huang called on Zu to come to the platform. Zu said a word but could not find the card. Another student shouted, "There!" and pointed to the board. Ms. Huang quickly stopped the student and said, "Don't tell her.



Zu is very smart. She can find it by herself.” Soon, Zu did find the word. Ms. Huang quickly praised her, “Very good. I knew you could do it.” Ms. Huang asked the students to applaud. Then she called on Johnny to perform the same task. Johnny stood at the front for a few seconds. When another student tried to coach him, Johnny seemed upset and said, “I know. You don’t have to tell me.” Ms. Huang interceded, “Don’t tell Johnny. He will get it. He doesn’t need your help.” Johnny studied the blackboard and found the words. Ms. Huang enthusiastically cheered, “Good job. Give him a hand.” As the classmates applauded, Johnny smiled and walked back to his seat. Ms. Huang further told the class, “You see, Johnny can find it by himself. He is very smart. If you tell him the answer, he will never know that he can do it. He will never have a chance to use his mind.”

Zu and Johnny were two of the slower learners. They could not write or spell the words at all. They often received failing grades. Their classmates, doubting the ability of the slower learners to answer correctly, often told them the answers. Ms. Huang disapproved, saying that she had high expectations for them, and that when students are treated as competent, they are likely to demonstrate competence. In her words:

We have to trust their [students’] competence. If you believe in them, they will have the opportunity to show you their competence. On the other hand, they will never have a chance to know their potential if we tell them the answers or show them how to do it.

Ms. Huang used praise and encouragement to help raise her students’ self-esteem and to keep them from feeling like failures. She asserted, “I have to say to them that they’re not failures, that they can learn. I think the encouragement and the

praise is what they need most.” In the example above, Ms. Huang treated the students as competent and encouraged them in their learning. Low-achieving students, Zu and Johnny, were making progress and demonstrating their ability to learn.

In addition, Ms. Huang believed that “each child has different ability and learns at different rate.” Therefore, drawing upon her knowledge of each student’s ability, her expectations were different for students at different levels. Ms. Huang explained,

Generally, I have higher expectations for my students. But I do take individual differences into account. For Zu or Johnny, two of the lowest achievers, I expect them to be up to the middle [raising her hand to her chest]. Si, she is the brightest student in my class. I expect that she will be up here. [raising her hand up to her head.]. When they make progress and reach the expectations, I will raise my expectations up to the next level. I want my expectations to be realistic. If I set high expectations that students can’t reach, they will find it easy to give up.

Ms. Huang was willing to push her students beyond their comfort zones because she believed in her students’ potential. She tried to develop students step by step, regardless of their abilities, allowing all of them to experience success. In other words, Ms. Huang held high expectations for all her students but set reasonable and reachable goals for each of them according to their individual differences. By fostering realistic expectations for students, Ms. Huang believed that they would be able to accomplish their tasks and achieve their goals.

#### *Guide Students’ Behavior*

Ms. Huang believed that the purpose of education was not only to teach basic skills and to achieve content-based learning; but, more important, it was “teaching them values, the way you’re acting, the way you get along with others.” Her mother’s

value of character development instilled in her a deeper sense of the purpose of education.

My mother valued the development of our [her siblings] character rather than our academic performance. My mother taught us to be independent and responsible. She taught us the value of how to act and how to get along with others. So I found that we are more considerate to others. We will use our empathy and put our feet in others' shoes. So we get along well with others.

Another factor that influenced Ms. Huang's decision to guide students' behavior was her regret that character education was missing from the curriculum. In all the schools where she had taught, "Students only learn to be self-involved academically. Students don't learn how to get along well with others or how to appreciate others." She took a contrary position; namely, that character development should be a valued objective. "I would rather my students be decent people rather than good students whose only success is academic."

Ms. Huang believed that guiding students' behavior was especially important for Indigenous children because "They are very pure and they accept what teachers give and guide them." She tried to give values to students and to guide them toward behaving well. She believed, "A child with a good heart will not act badly. I plant the seed of goodness in their hearts and I believe it ultimately will grow in the future."

Maintaining that she was very sensitive to each student's behavior problems, Ms. Huang also considered herself a competent counselor. That sensitivity and competence derived from her counseling expertise. Aside from majoring in counseling, she was responsible for her school's counseling program, and she attended many training sessions. She accumulated considerable training in counseling, developing her instincts to perceive her students' problems and her skills

to reach children effectively. For example, Ms. Huang expressed her understanding of a student's behavior problems and her poor relationships with her peers:

Xuang was a smart little girl, but over-anxious to please. She would keep talking or blame others to catch my attention during class. If I blamed her misbehavior, she would bite her nails. When she got mad, she got really mad. She would show it to you. She was quite expressive. Moreover, Xuang kept fighting with others so she had very bad peer relationships. You found that when playing games, no one wanted to be in the same group with her.

Ms. Huang realized that Xuang's family circumstances greatly impacted her behavior. She explained that Xuang grew up in a combative family. Her mother and stepfather had frequent bouts. As a result, Xuang was insecure and did not know how to get along with others.

Ms. Huang spoke passionately about the importance of reaching Xuang. "If we can't find a way to reach her, she is going to be a big problem in the future." Ms. Huang devised some specific classroom strategies to help Xuang improve her behavior. She positively reinforced the child's good behavior with rewards. She kept a Xuang scorecard at the corner of the classroom blackboard, adding or subtracting points, based on Xuang's compliance with classroom rules. Good behavior earned points toward a reward of cookies at the end of the day. Because most of the students' families were poor, "giving food always is a big thrill to these children and using food as a reward is one of the best ways to motivate them." However, Ms. Huang did not want students to always focus on extrinsic rewards. She would gradually replace them with intrinsic rewards, such as more praise and encouragement, to improve behavior.

On the other hand, Ms. Huang often gave Xuang verbal warnings for inappropriate behavior. Unheeded warnings meant losing recess. Ms. Huang said, “Students buy into it because they love to play and they can’t tolerate losing recess time.” Nevertheless, Xuang became upset when corrected. After reprimanding Xuang in class, Ms. Huang approached her and had a follow-up talk with her after class. Ms. Huang said that the purpose of a follow-up talk was to calm Xuang’s emotions and to provide guidance for acceptable future conduct. During her talks with students, she explained the reasons behind her actions and told them how much she cared about them.

I need to let her [Xuang] know the reason that she had been punished. I want to talk to her privately to let her know what she did wrong in the class and that I am trying to help her. This is very important. Students need to understand that you’re not trying to embarrass them. You have to let students know that what you dislike is their behavior. You do like them and you really care about them. If you just reprimand without explaining, the students will believe that you don’t like them anymore. And they won’t like the teacher either. Possible outcomes include loss of self-esteem or desire to learn.

According to Ms. Huang, her strategy of comforting students by listening and talking to them after public reprimands evolved from her own school experiences. She had suffered a misunderstanding about cheating on a test. Her teacher would not listen to her attempts to explain. The experience had a lasting negative effect on her school career. She gave up learning, but in the final analysis, it did make her a more compassionate teacher. She learned to respond to students individually and to make them feel emotionally secure by listening to them and talking to them when they behaved unacceptably. Ms. Huang said, “I would never deny a child that kind of interaction. I feel responsible for not letting them be hurt by a teacher like I was

before.” As a teacher, Ms. Huang gave students a chance to explain their intentions and actions, and she made sure the students knew that she had heard them—and that, essentially, she cared.

### *Summary*

This section describes Ms. Huang beliefs about the learning and teaching of Indigenous students. It also identified practices that were guided by her beliefs about and knowledge of students’ academic and social needs.

Overall, based on her accumulated teaching experiences, Ms. Huang believed that all students were unique, and that teaching required adapting to students’ needs. She drew upon her knowledge of each child to plan unique teaching strategies. She adapted her teaching to be compatible with students’ learning styles and interests in order to engage them in learning.

Academically, Ms. Huang believed that all Indigenous students were capable of learning. Successful teaching required the instructor to demand the best from students and to help them reach their fullest potential. In practice, Ms. Huang’s high academic expectations took individual differences into consideration. She set reachable goals for individual students and pushed them to achieve, but she did not force children to achieve beyond their ability.

Ms. Huang believed that teaching carried with it the responsibility to guide students’ social behavior. This belief stemmed from her mother’s value of character development and from her own observations of missing character education in schools. She gained insights into individual students’ family situations, behavior problems, and peer relationships. Strategies that Ms. Huang developed to modify

students' classroom behavior included reinforcing good behavior with rewards, warning about the consequences of unacceptable behavior, and talking to and listening to students after reprimanding in class. Her strategies were based on the use of rules and penalties as behavior-management techniques, but always tempered with love and concern. That technique resulted from her reflections on her own negative experience with a teacher over a misunderstanding. Consequently, she became a compassionate teacher, caring about students' fears and other feelings.

### Curriculum and Instruction

This section focuses on Ms. Huang's beliefs about and knowledge of curricula and of students' learning difficulties. It also outlines instructional strategies used by Ms. Huang to facilitate students' learning the curricula and their overcoming academic difficulties. The section is subdivided into four themes: curriculum comprehension and instruction, students' writing problems and instruction, the after-school care program, and culture-related curricula and instruction.

#### *Curriculum Comprehension and Instruction*

Ms. Huang's Indigenous students were low achievers who were uncertain about the relevance of their two major subjects: Chinese literature and arithmetic. She believed that students were "turned off" by learning, not necessarily because it was difficult, but more because they lacked real-life experiences with the curriculum. Without such experience, "it is very difficult for them to comprehend the knowledge in the content." For example, in an arithmetic unit, Counting Money, one question posed was, how much money would they need to buy a pizza? Ms. Huang realized that her students had a hard time with the question because "they have no idea what

pizza is. They rarely have opportunities to eat pizza in the tribe.” Students having to use their imagination—rather than their life experience—was a major reason for their giving up so easily and losing their motivation to learn.

Ms. Huang believed that learning occurred best when teachers created links between the curriculum and the children’s life experiences. To establish those links she developed several guidelines: provide concrete examples, expose students’ to different life experiences, connect teaching to students’ cultural backgrounds, and modify tests to make them more relevant to students’ life experiences.

First, as often as possible, Ms. Huang provided concrete, relevant materials to help her students better understand the lessons. For example, she purchased samples of food and other things mentioned in the textbooks but unfamiliar to the students, such as pizza, donuts, and hot dogs. Ms. Huang said, “When they have experience to see it or eat it, they would know what it is.” For another example, when she taught the unit, Knowing the Calendar, she asked her students what holiday fell on May 15<sup>th</sup>. They did not know. Ms. Huang realized that the date was a traditional Han Chinese holiday, so she told the students, “It’s alright you don’t know. Indigenous people don’t have this holiday.” She then told the class that the holiday was called “Dragon Festival.” She introduced them to the origin of the holiday and to traditional foods that the Han Chinese people ate. She also brought the traditional food, “Chong Ci”, a pyramid-shaped mass of glutinous rice wrapped in leaves, for her students to eat. “Providing concrete materials,” Ms. Huang affirmed, “can increase students’ knowledge and experiences, thus increasing their comprehension.”



Second, Ms. Huang recognized that her students had an unusually narrow view of the world, limited to the mountainous area in which they lived. To compensate for that limitation, she took them to the city to expose them to different life experiences: McDonald's, movies, steak at a nice restaurant, department stores, and museums. Ms. Huang said, "You can't describe in words how excited and amazed they are in the city. It's like a whole new world for them." By establishing links to the outside world, Ms. Huang broadened her students' view of the world, which in turn increased their thinking processes and their interest in learning. Later, when Ms. Huang taught the Chinese word for "children," Fang immediately responded, "children's meal." Ms. Huang smiled and asked the students where they had eaten a children's meal. They all shouted loudly, "McDonald's." Ms. Huang asked, "Could you tell me what you ordered?" The students gave different answers excitedly. Ms. Huang further asked them to make a complete sentence. Fang said, "We went to McDonald's and ordered a children's meal." Ms. Huang said, "Good job. Fang can make a long sentence. Give him a hand." All the students applauded him. Ms. Huang concluded, "These excursions make the learning real for them."

Third, Ms. Huang believed that, most importantly, she would be able to facilitate students' learning by connecting her teaching to students' backgrounds. To understand her students' cultural background, she studied resources available in the community and then designed her curriculum and instruction around the information gathered. She routinely engaged her students in learning by connecting her teaching to their real-life experiences. For example, in the Chinese unit, Small Lakeside, the objective was to teach the students about the biology in and around a lake. Having

decided that the unit was too abstract for her students, Ms. Huang modified the unit to incorporate a local lake, San Lake, with which the students were more familiar. She began the unit by asking who had been to the San Lake. All students raised their hands and began to talk enthusiastically about their visits. When asked what they saw in the lake, many students raised their hands. Purple said, “There are many fish.” Yi said, “Trees.” Qi said, “A frog.” Johnny shouted out in the Indigenous language, “Wu Ci Kai.” Not familiar with the term, Ms. Huang asked what it meant. “Turtle!” The class shouted out loudly and excitedly. Ms. Huang smiled and praised them for using their mother language to teach the teacher, which amused the class. Then, she took out the vocabulary cards, which were for the new words in the unit, and attached them to the blackboard. She led the class in the reading of the words. They were excited and read loudly, especially the words for fish and frog, which they had just shared in the class. They thoroughly enjoyed the learning experience whenever Ms. Huang planned and presented instruction built on students’ cultural backgrounds and whenever they could contribute in class.

Fourth, Ms. Huang pointed out that students were better able to solve arithmetic problems that were linked to the children’s life experiences. She stated, “They often were stuck there when solving mathematics problems in a test.” She remarked, “It is not because they are stupid. Many of them simply could not understand the problems.” Ms. Huang described how she adjusted test problems to make them as relevant as possible to the students’ experiences. For example, given the question, “How many dates did you eat?” she would substitute a traditional Indigenous name, such as “Y-By” for “date.” Y-By was a food known to her students, while dates were

seldom seen in the tribe. She concluded, “When your pose problems that expose students to real situations, they are doable, which in turn, gives them confidence in solving problems.”

### *Writing Difficulties and Instruction*

Ms. Huang’s students had difficulty writing basic Chinese words, simple sentences, and short compositions. “They dislike writing because they are lazy to memorize words. They don’t like to use their mind to think how to write the words or sentences.” Ms. Huang added, “They need more practice. However, their parents don’t give them any assistance at home. I’m the only one who made efforts.”

To help students master the basic words, Ms. Huang’s strategy was, simply, practice and review. “You have to let them practice everyday. Also, you can’t keep moving forward. You have to move backward to do the review. Otherwise, they very easily forget all the words you taught.” For those reasons, Ms. Huang had her students practice new words in their workbooks and for homework, right after teaching the words. On the following day she gave a dictation test. Then, she kept reviewing the words from previous lessons and gave tests after the reviews. Ms. Huang vowed that she had seen some improvement in the students’ mastery of words after practice, review, and testing.

For more challenging writing assignments, such as writing longer sentences or short compositions, Ms. Huang found other activities, based on students’ interests, to facilitate the learning process. For example, she took advantage of her students’ enjoyment of listening to stories. She read short stories for children and showed them pictures. She also searched for stories on the Internet and showed them to her

students. After the children enjoyed a story, Ms. Huang asked them questions about it, such as how the story began, what happened in the story, and what were the results. Her purpose was to guide students' understanding of the process of writing a story.

Ms. Huang also knew that “children love to draw. They have creativeness and motivation in drawing. If simply asked them to write, they would feel bored.”

Therefore, Ms. Huang would ask the students to first draw pictures of what they wanted. Then, she would guide them in writing sentence-by-sentence, based on their drawings. Ms. Huang found that drawing their stories helped the students focus on their writing.

#### *The After-school Care Program*

Because of her students' difficulties with reading comprehension and writing, Ms. Huang spent considerable time helping students understand what they read and master basic skills—so much time, in fact, that she could not keep up with the mandatory curriculum and instruction.

The mandatory curriculum required teachers to teach a lesson in five classes in one week, which includes five major sessions of new words teaching, content comprehension, workbook practice, and assessment. It's mission impossible. I need time to let them understand the content. They need time to practice. I have to take at least four or five classes to teach only Chinese words to get them mastery. It takes me at least ten classes to complete teaching a lesson.

Ms. Huang explained that she felt restricted by time. She stated, “You've got to realize that being with children for four hours a day is not enough for the kind of learning you want for them.” One thing that helped, Ms. Huang said, was having an after-school care program. As an Educational Priority Area School (EPAS), San Elementary School received additional budgetary support, part of which was

allocated to the after-school care program. The goal of the program was to provide intervention for students who were struggling as learners. At the San Elementary School the program was designed mainly for lower-achieving students at the primary grade level. Officially, the program provided one hour after school every Monday, Thursday, and Friday, which Ms. Huang found insufficient. With the parents' consent, she volunteered to extend the after-school time to four hours every day except Wednesday, which were reserved for professional development. The longer work periods after school allowed Ms. Huang to catch up with the curriculum schedule. Also, she used the time for one-on-one remedial work with students. Although after-school time required sacrifices by Ms. Huang, she said, "I don't care for myself. I only care how much I can help them and how much they need."

#### *Culture-related Curricula and Instruction*

According to Ms. Huang, San Elementary was a traditional Indigenous school. The development of Indigenous culture was one of the school's goals. Therefore, another use of the EPAS supplementary funding at the school was to hire Indigenous specialists from the community to teach traditional arts and crafts at higher-grade levels. Woodcarving was taught the previous year; Indigenous traditional dancing was the current year's focus. Students learned dancing from a specialist on Wednesday afternoons.

In addition to the use of EPAS funds, another effort made by the school in support of Indigenous culture was the development of a so-called school-based curriculum (SBC). According to Ms. Huang, SBC was designed to implement the idea of school-based management. The Department of Education gave authority and

autonomy to local schools so that their school board could develop their own curricula, best suited to the needs of the local community. Given that the majority of the population belonged to the Bunun tribe, the school-based curriculum in San Elementary School focused on the Bunun culture. The curriculum and instruction were designed and implemented by teachers across grade levels. Teachers met at the beginning of each school year to discuss the content of the curriculum. They came up with a “spiral curriculum” for grades one through six. That meant that the higher the grade level, the more complicated the course material. For example, the major theme for the year of this study was millet, the traditional Indigenous grain. Higher-grade students learned how to plant millet. In the first grade Ms. Huang gave her students an elementary understanding of millet. Her class visited the Community Development Association (CDA), which preserved Bunun tribal culture, such as media, books, and objects of their culture, ecological environment, and agriculture. Ms. Huang and an Indigenous CDA volunteer used pictures to introduce the students to millet and how the farmers planted it. After the CDA tour, the students visited a millet farm, where they learned about millet in its natural state. M. Huang also decorated the classroom with a tuft of dried millet on the top of the back bookshelves to help students become familiar with millet.

Ms. Huang affirmed the importance of the school-based curriculum and instruction to help students learn their culture: “If we do nothing for them, they’re going to lose their cultural roots...The greatest crisis of Indigenous culture is the culture break in the tribe.” She further explained,

For the grandparents’ generation, they still keep their culture. The parents’ generation works outside of the tribe and begins to lose contact with their

culture. They don't speak the mother language anymore. I feel that most parents don't feel any need to learn their culture. As a result, the younger generation doesn't acknowledge the uniqueness of their culture. Even though they recognize it, they don't feel any special of it. How can you ask the next generation to learn their culture when their parents don't value it?

Ms. Huang described herself as having a sense of mission to preserve the Indigenous culture. Her purpose in teaching the school-based curriculum was to help her students understand their heritage and even to honor their cultures. Rooted in their tribe, "children can love their culture, and one day they can devote themselves to inherit and develop their culture," Ms. Huang hoped.

On the other hand, Ms. Huang had some misgivings about culture-related curricula and instruction. Indigenous specialists from the community did not have teacher training; therefore, they did not know how to manage a classroom or motivate students to learn. On the other hand, Han Chinese teachers who designed the school-based curriculum did not have the requisite knowledge and skill to teach Indigenous culture. They had neither the experience with nor the education in the Indigenous culture. They only searched for information from the local community and could not provide students any additional material. As Ms. Huang described, "Difference in profession makes one feel worlds apart. How can you teach something for your students when you're not good at it?"

Ms. Huang wished that she could do something to promote Indigenous culture, but she doubted her ability to accomplish much. She said, "It is paramount that you understand a culture before you teach it." She carried on, "We Han Chinese teachers really need intensive professional development to help us learn to teach Indigenous culture we don't understand." She suggested that the school system or the

government help teachers become knowledgeable about Indigenous cultures in order to help children learn their own culture and become tolerant of others. Moreover, Ms. Huang suggested that Indigenous specialists receive training in teaching methods and in students' learning styles to increase their effectiveness.

### *Summary*

This section integrated Ms. Huang's beliefs about and knowledge of curriculum alternatives and students' learning difficulties. It also identified Ms. Huang's teaching strategies to improve students' learning. First, Ms. Huang acknowledged the experiences that students brought to the classroom, and she urged that curriculum development drew upon students' typical life experiences. Her strategies included providing concrete materials, exposing students' to different life experiences, connecting teaching to students' cultural background, and adjusting assessment procedures to make them relevant to students' life experiences.

Another learning difficulty that Ms. Huang identified was students' writing, including words, sentences, and compositions. She believed those problems were outgrowths of students' laziness and parents' lack of involvement. She used drilling, reviewing, and positive reinforcement to help students learn words and construct sentences. To help her students learn composition, she read them stories and advised them to draw pictures to structure sequences of events for their stories.

Ms. Huang pointed out that time constraints were her greatest challenge in improving students' reading comprehension and writing. Fortunately, after-school hours provided additional teaching time. She used the time to catch up with the mandatory curriculum and to do remedial work with individual students.



Ms. Huang perceived the loss of Indigenous culture and believed it was her responsibility to help students learn about their culture. San Elementary School was fortunate to have culture-related curricula and instruction by Indigenous specialists and teachers to direct culture-related activities. Still, the learning and teaching processes were hindered by Indigenous specialists' lack of a teaching background and by a comparable lack of Han Chinese teachers' knowledge of Indigenous history and culture. Ms. Huang suggested that some resolution of the problems would result from giving cultural specialists some training in teaching and from educating teachers about the Indigenous culture.

#### Indigenous Family Relations

Some strategies in Ms. Huang's teaching style were guided by her beliefs about and knowledge of Indigenous families. Two such strategies, discussed below, were (1) building trusting relationships with parents, and (2) establishing caring relationships with students.

##### *Build Trusting Relationships with Parents*

After five years of teaching in a Bunun Indigenous tribe, Ms. Huang believed that "Bunun is a very united tribe but they exclude outsiders." Ms. Huang sensed that the parents' opinions of Han Chinese teachers were not necessarily positive. She felt that Bunun Indigenous parents did not fully trust Han Chinese teachers. Many parents believed that only indigenous teachers could teach their children well. Therefore, they preferred teachers from Indigenous backgrounds.

Parents' distrust of Han Chinese teachers discouraged them from becoming more involved in their children's education. They took for granted that teachers

would shoulder the full responsibility for educating their children. Ms. Huang gave some examples:

I had one parent whose child was sick. He gave the insurance card to you and asked you to take his child to see the doctor. Some parents are alcoholic. When they drink, they hit their children. When the children have behavior problems, they think that it's the teacher's responsibility to discipline the children. They expect us to do their job. Is it right?

Ms. Huang expressed frustration with the parents' indifference towards their children's education. However, she believed that the parents' attitude might be rooted in their lack of parenting knowledge and skills, so that they did not understand their responsibilities or grasp the need for parental participation in school matters.

Therefore, Ms. Huang believed that it was very important to reach out to parents and build trusting relationships so that teachers could better help them understand how to help their children.

Ms. Huang made notable efforts to establish good working relationships with parents. Before each semester, she talked with a school volunteer, an Indigene who lived in the tribe, to gain insights about her students' families. With that basic information, she visited each student's home, accompanied by a volunteer translator. The purpose of the visits was to learn about the students' backgrounds, as well as the parents' expectations of both the teacher and the school.

I ask the parents to tell me about the strengths and weaknesses of their child. I also ask what areas they would like me to focus on with their child. I make a note of parents' expectations. It is really important to do the home visits so that they know that I really care for their child.

Ms. Huang's home visits were not limited to once a semester. There were repeated after each exam. If the parents were not at home when she came by, she

would telephone them, send a note, or write a letter. Her frequent contacts with parents were to inform them of their child's performance and, in the event of any learning difficulties, to keep them aware of the need for further parental help. She also communicated with parents about how to assist and encourage their children, regardless of their performance.

One difficulty Ms. Huang encountered when she dealt with parents was their unwillingness to listen to her reports of their child's achievement problems and misbehavior. "If their child has any problem and you report it to them, parents feel that they have lost face." One method she used to overcome that difficulty was to first praise the student's performance before bringing up the issues.

I use the gradual way of talking to parents about students' problems. I speak to them about their child's advantages first. Speaking about their child's good performance at school lets parents feel proud of their children so they are more willing to listen to any suggestions. Then I give advice about what their child needs to do to be better. You don't talk to parents by beginning with a critique of their child; otherwise, parents will avoid listening to you next time.

In addition to fostering positive communication with parents, Ms. Huang had also made an effort to involve parents in school life. For example, she held parent-teacher conferences at the beginning of each semester. She used those opportunities to share her expectations with parents and to tell them what they could do to help her. Ms. Huang had also developed some parent-child activities and encouraged parents to participate. Examples of her parent-child activities included cooking, studying, and taking trips. In addition, because of her responsibilities as school counselor, she had organized a school-wide parent conference, the purpose of which was to promote

better parenting practices. Ms. Huang stated her hope that, “Parents can receive knowledge of how to educate their children.”

However, Ms. Huang maintained that there was low parental involvement in school work and school conferences. To solve the problem, Ms. Huang proposed, “We can’t expect or wait for parents to come to school. We need to make them accountable and we need to work with them.” For example, “Teachers can become more involved in the community, such as holding a study group or parents’ growth group.” Her idea was to reach out to Indigenous parents if they could not come to school. She believed, “If we spent money to bring the parenting information to the tribe and make the family functional, children would not have so many problems.” Of course, Ms. Huang realized that parent education would not be accomplished through the efforts of one teacher. It needed to be much more extensive, a joint effort of the school and the families. She hoped that schools and the government would invest more resources into strengthening the connection between the community and the school to facilitate the task of parent education.

#### *Establish Caring Relationships with Students*

Ms. Huang had conducted many home visits to understand students’ backgrounds. She had also seen students’ poverty-stricken lives.

Most of the parents do not have jobs. They do not make any money. They are extremely poor. For Wai’s home as an example, there is no table at home and only one bed in the living room. The living room is one-fourth the size of the classroom. They eat and sleep in that room. There are a lot of trash and flies in front of his home. You can’t imagine the life that you see.

Because she knew, first-hand, the economic plight of Indigenous families, Ms. Huang had sympathy for her students and had become more considerate of their

problems. Her awareness of their home life made her want to care for and nurture her students. She likened her role to that of a mother. She had a maternal feeling for each child and ensured that her students were cared for much as if they were her own children.

Ms. Huang's caring was sometimes demonstrated in subtle ways. For example, she created and maintained a classroom atmosphere much like that of an extended family, in which children could "feel safe and feel protected." She allowed her students to design their most favorite place, which was set up on a large multicolored carpet in the back of the room, where they could play with toys or read books on the carpet. In addition, she bought for each student a bedquilt, and she tucked each child to sleep at naptime. The students' participation in setting up the classroom environment and their being put to bed by the teacher, Ms. Huang said, made them feel more at home.

Ms. Huang cared about her students' self-image. She gave them shoes and clothing when she saw them looking unkempt. She also cared about her own image, always dressing appropriately. She said that she was the students' role model. She mentioned that the girls in her class wanted to see what she was wearing and wanted to learn from the teacher. She dressed well so as to look good for her students, as well as to hold their attention.

Ms. Huang's caring behavior also showed in her concern about her students' diets. Ms. Huang stated that many of the students "don't have food to eat and many of their parents provide nothing for their children to eat, leave them totally on their own." Ms. Huang said, "It is very important to satisfy students' basic needs. If they

aren't satisfied, how could you ask them to have a higher motivation to learn?" She bought breakfast for students who had not eaten and made chocolate milk for the class. Sometimes she cooked hot dogs for them during recess. The school provided a free lunch for each student. Ms. Huang sat with students in the lunchroom, giving them vegetables and meat.

School is a place where children can have a decent meal. When you observed their need for food and joyful faces when satisfied with food, you only want to care for them more and do as much as you can.

In addition to satisfying students' physical needs, Ms. Huang provided them with necessary school resources. She said that most parents did not purchase adequate school supplies; so, she often purchased supplies for them. For larger expenses, such as tuition, Ms. Hung helped them apply for scholarships or funds, deposit the money at the school, and make withdrawals to cover necessary expenses.

Another parent-like behavior of Ms. Huang was her urging students to live up to their responsibilities. Her purpose was to instill values that, she perceived, the children could not receive from their meager home life. For example, Ms. Huang had found that her students and their parents became accustomed to relying on support from the government or the school. "Their hands have been out to receive help from others for a long time." She told students to make an effort to improve their situations. "They can make an effort to succeed and one day their hands can reach out to give help to others."

### *Summary*

This section outlined Ms. Huang's beliefs about and knowledge of Indigenous parents and family, as well as her reactions to them. Ms. Huang sensed that

Indigenous parents felt hostility toward Han Chinese teachers and were indifferent about their children's education. Ms. Huang valued the parent-teacher relationship as a way to build trust and increase parental involvement accomplishing school objectives. She interacted with parents via home visits, telephone calls, notes, and letters. She learned her students' backgrounds and assured parents that she cared about their children. Ms. Huang also had an empathetic and sensitive reaction to parents' needs and concerns. For her, the effective way to communicate with parents was to, first, praise their child and, then, to voice her concerns. In addition, she sought to involve parents in school life, at the same time pointing out the problem of low parent participation. To provide an institutional involvement in her solutions, she suggested a cooperative effort between the government and school to promote more outreach to parents and increased education and public relations for the tribe.

Ms. Huang felt compassion for the families' extremely difficult living conditions and the widespread misery of Indigenous people. Realizing their difficult family circumstances, she reacted empathetically to her students' problems. Considering herself a surrogate mother, she felt obliged to fulfill her students' emotional, physical, and financial needs. Her support took various forms. She created a family-like classroom where students could eat, sleep, play, and learn with their teacher. She valued her personal appearance, making the effort to look good for her students, both to set an example and to hold their attention. She also provided students with physical and financial support. Moreover, she passionately lectured them about their responsibility to make an effort within that family-like context.

## Conclusion

Ms. Huang's pedagogical practices showed her commitment to support students' academic, social, emotional, physical, and financial needs. Her caring gestures were guided by her beliefs about and knowledge of herself, of education, and of Indigenous students, parents, and families. More specially, Ms. Huang exhibited a strong desire to be a teacher and a sincere love for her students. She believed that she could make a difference in her students' lives. As a teacher, she considered the education of Indigenous students to be an especially satisfying mission. Because of her love and passion for her work, she planned to continue teaching Indigenous students and to search for ways to increase her knowledge and improve her skills.

Ms. Huang recognized her Indigenous students' difficulty in learning to write and to comprehend written materials. She believed that those difficulties were caused primarily by three factors: the irrelevance of the curriculum to the students' personal lives, the students' laziness, and the lack of parental involvement in their children's education. Nevertheless, she believed that each student was unique and capable of learning. Realizing that teaching requires the ability to adapt to students' needs, Ms. Huang employed some strategies to facilitate students' learning. She customized her teaching to meet students' learning styles and interests. She led practices and reviews to help students master basic literary skills. She set attainable goals for students and pushed them to achieve their potential. She constructed bridges between the content of the curriculum and the students' knowledge and experiences. Moreover, she built a trusting relationship with parents and increased their involvement with the school in order to increase their role in the education of their children.



Ms. Huang was aware of her students' family situations, behavior problems, and peer relationships. She believed that teaching carried with it the responsibility to guide students' behavior. She passionately lectured students about the value of and responsibility for making the effort to achieve a better life. She also guided students' behavior in the classroom by using rules and consequences as behavior-management techniques. Her love and concern for her students were reflected in her conversations with them. She listened when they expressed their feelings and fears.

Ms. Huang showed her sympathy for the families' extremely difficult living conditions, and she believed that a teacher should play the role of surrogate mother to take care of students' needs. She created a home-like classroom and a nurturing environment. She valued her personal appearance, striving to create and maintain an appropriate image for her students. She also offered physical and financial support for students, providing food, purchasing school supplies, and applying for scholarships and funds for students' school expenses.

Ms. Huang's family life and schooling shaped her personality and her values and helped her formulate beliefs about and interests in teaching Indigenous children. For example, her mother's emphasis on character development created indelible impressions that she transmitted to her students. A negative educational experience, one of her teachers, who misunderstood her, led her become a compassionate teacher. Ms. Huang's teaching experience at different grade levels and in different schools convinced her that each student in each grade level and school is unique and led her toward and into student-centered teaching. Her expertise in counseling sharpened her instincts to discover her students' problems and her competency to reach and direct

children effectively. However, Ms. Huang pointed out that the lack of such preparation in teacher-education and professional-development programs left her unprepared and forced her to rely upon herself to learn how to teach Indigenous children and to improve her methods through a recurring cycle of teaching, reflection, and revision.

Ms. Huang's school work was both supported and constrained by certain unique contextual factors, including the school culture, assigned administrative duties, time constraints in teaching the mandatory curriculum, the after-school care program, and the school-based curriculum. She identified a culture of mediocrity among her colleagues that hindered her instructional reform by discouraging teaching initiatives and innovations to achieve one's best teaching. She felt that her heavy administrative workload forced her to work during recess or after school and created stress and burn out. She also pointed out that time constraints prevented her from keeping pace with the mandatory curriculum, from improving students' reading comprehension, and from conducting drills in basic skills. Fortunately, the after-school care program somewhat relieved her time constraints and allowed her to catch up with the curriculum and facilitate students' learning. Finally, Ms. Huang believed that it was very important to have culture-related curricula and instruction to preserve the Indigenous culture and to significantly facilitate the perpetuation of Bunun culture. Moreover, the learning and teaching process in her school district was hindered by the lack of teaching background among supplementary Indigenous specialists and, conversely, the inadequate cultural knowledge of the Han Chinese teachers.

## CHAPTER 5

### MS. CHEN

The subject of this chapter is Ms. Chen, a teacher in a near-urban school. The findings in this chapter are organized into four sections: (1) Background and teaching context, (2) The education of Indigenous students, (3) Curriculum and instruction, and (4) Indigenous family relations. The first section covers Ms. Chen's personal and educational background, as well as the context in which she taught. The other three sections present Ms. Chen's opinions about the education of Indigenous students, her school's curriculum and policies, and the role of the Indigenous family in the education process. Ms. Chen's teaching practices, which were guided by her beliefs and knowledge regarding these issues, are reinforced. Ms. Chen's educational and other experiences that influenced her beliefs, knowledge, and practices are included in each section. Each section concludes with a summary of the findings.

#### Background and Teaching Context

This section begins by documenting significant aspects of Ms. Chen's personal and educational experiences, describing the influence of factors such as her family, her student years, her decision to become a teacher, and her preparation for teaching Indigenous children. The section continues by framing the school context in which Ms. Chen taught: the school environment, demographic data, the school culture, and school policies. The section concludes by describing Ms. Chen's classroom setting, including student information, teachers' schedules, and an explanation for her classroom arrangement.

### *Teacher Background*

Ms. Chen, a 31-year-old Han Chinese, was born and raised in Kaoshiung City in western Taiwan. She grew up in a poor family with four siblings. Because her father was irresponsible, her mother had to support the family by working in a textile factory. Her mother worked very late every day, so she trained her children to be independent. Each child had family responsibilities. Ms. Chen and her oldest sister had to take care of the little brothers and do the cooking. Her brothers did the cleaning and laundry. Ms. Chen recalled, “We were very dependable, and we were responsible for not making our mother worry.”

Of her experiences in grade school, Ms. Chen remembered that there were two teachers with whom she felt uncomfortable. She thought her fifth-grade teacher favored students who came from rich families. Rich parents paid for the teacher to provide after-school supplementary instruction for their children. Families that could not afford to pay the cost could not attend. The other teacher that Ms. Chen recalled was her art teacher in the fifth grade. She often praised the rich students and gave them high grades. Ms. Chen rarely received praise, although she worked hard. She felt frustrated and lost her confidence in her artistic ability. She still complained, “How could a teacher treat students differently, based on their wealth? Being poor does not mean that a child cannot learn.” With those unpleasant recollections, she pledged, “I would never put a label on my students; I would treat them equally.”

Fortunately, Ms. Chen had some good teachers who had a favorable influence on her career. Her physical-education teacher in the fifth grade recognized her athletic ability and trained her in track-and-field sports. He took her to participate in

numerous races, and he encouraged her when she needed it. Another inspiring teacher was her art teacher in junior high school. She discovered Ms. Chen's gift for drawing and patiently guided her. She also took Ms. Chen to various competitions. Her accumulated recognition in competitions fueled Ms. Chen's confidence in art so much that she decided to become an artist. That decision, however, was rejected by her mother, who believed that the only way to make a living as an artist was to be an art teacher. Ms. Chen readily accepted her mother's judgment, because she aspired to become both an artist and a teacher—someone who could be as inspiring as her two former role-model teachers. Therefore, she chose to study in the Department of Art Education at the Taitung Teachers College.

In teachers college, Ms. Chen was introduced to Indigenous culture, especially traditional totems and crafts. She also visited Indigenous tribes' harvest festivals. Because of her increasing interest in Indigenous culture and art, she opted for student teaching at an Indigenous school, the Bing Elementary School. She soon discovered that she had not learned how to teach Indigenous students, but her student teaching experience compensated for her lack of preparation. Her mentoring teacher passed along much of the needed practical knowledge and skills, such as how to resolve students' problems in school and how to deal with Indigenous parents. She also worked with her mentor to plan lessons and design tests. They recalled and discussed their teaching and observations. Together they developed ideas for the next steps. Ms. Chen described, "My mentor is a great help to me. Even today, we still have many conversations and discussions. We become very good friend and are still in touch."

After student teaching, Ms. Chen received a bachelor's degree in elementary education, majoring in art education. She decided to stay in Taitung because of her rewarding internship. She chose to teach at Dream Elementary School because of its similarities to Bing Elementary School. She described her teaching career as a continuous learning experience. She searched for information to improve her teaching from colleagues, workshops, and readings. She said, "I am always trying to push the realm of where I am and to invent and experiment with what I am doing." At the time of this study, she was studying in a children-literature masters program at Taitung Teachers College, to learn how to guide students' learning of Chinese literature. What she learned was promptly implemented in her classroom. For instance, after taking a course in children's poetry, she immediately shared the poems she had written with her students and involved them in a discussion of poetry writing. She also consulted with her professors when she encountered difficulties in her classroom practices. She believed, "Learning by doing is always the best way to improve your teaching."

At the time of this study Ms. Chen had been teaching for seven years at various grade levels at Dream Elementary School. She said that she had continued to teach at the same school because of her love for her Indigenous students.

These children need a teacher who has a sincere interest in taking care of them. I am like their mother or best friend. I love them and they love me, too. I couldn't set my mind at ease if they had had a teacher who would not treat them like the way I do. When I realize that, I can't leave them.

Ms. Chen had so much confidence in her ability to teach Indigenous students that she could not turn them over to some other teacher. Her confidence stemmed from her sense of accomplishment. As she described it, "I am like an artist. My

students' changes reflect my work on them. I do my best to teach them, as I do for my art works. When I see that they are growing, I feel fulfilled and rewarded.”

### *The School Context*

Dream Elementary School was a near-urban school, located in a Puyuma Indigenous community on the southwest side of Taitung City. The school grounds were bisected by a wide brick road. On the left was a small pond; on the right, a big banyan tree. Beside the banyan tree were several areas paved with flagstones leading down to the large and grassy athletic field where students played and exercised. Around the field were several flagstone chairs and tables that, according to Ms. Chen, were traditional Indigenous furniture that the school used for decoration. Beside the pond and parallel to the road stood a two-story building that housed faculty offices and classrooms. There was a hallway in the middle of the building. Along both sides of the hallway were display cases exhibiting students' artwork and poems and a display relating to music and art masters. Farther along were other connected flagstone areas leading to the back of the school. The back area had other small ponds and a field planted with colorful flowers. Behind the ponds and the field was a spacious grassy area with trees, flagstone tables and chairs, along with a basketball court.

The school was for grades one through six. For each grade there was one classroom, for an average of sixteen students, and a teacher. For the school year 2004-2005, the school's enrollment was 99 students. Approximately seventy per cent of the students came from the Puyuma tribe. The other students were Han Chinese and Indigenous students from the Bunun and Amis tribes. The students' parents

represented a variety of backgrounds and careers. Indigenous parents generally had lower educational backgrounds, working as farmers in the community or as laborers in the city. About one-third of the students came from single-parent families or were being raised by grandparents.

There were thirteen faculty and support staff in the school, including the principal, two directors, one nurse, two support staff, and seven certified teachers. Among the teachers, one was Indigenous and six were Han Chinese. Collaboration among teachers was one of the school goals. For example, with expertise in art education, Ms. Chen collaborated with the Indigenous teacher whose specialty was music education. They designed the art and humanity curriculum and instruction for the third and fifth grades. Also, they shared their knowledge and experiences with their colleagues and others during professional-development meetings. Ms. Chen was grateful for the opportunity to cooperate with the Indigenous teacher, who was like a mirror for seeing her teaching from a different angle. She explained:

Ma-Ya [the Indigenous teacher] always questions me about what I am doing and why I am doing it. She helps me clarify and refine my thinking. There is comfort in knowing that someone else is there to understand you and provides you to look at things differently.

Unfortunately, not all the teachers in Dream Elementary School were receptive to collaboration and changes in their teaching methods. Ms. Chen said that many teachers had chosen Dream because of its beautiful environment and its convenience to the city, but also for its freedom from parent intervention. Predictably, then, most of the teachers were content with their teaching and were not inclined to change. By contrast, Ms. Chen's continuing education and changes in her methods caused other



teachers stress, especially when her students performed especially well. When asked how she saw herself fitting into her school environment, and especially with her colleagues, Ms. Chen answered, “I am like a thorn that exerts pressure on other teachers—but does not pull them apart. It stimulates them to change for the students’ good.”

Ms. Chen further pointed out a school-leadership problem. Because of the value he placed on the school’s reputation, the principal was eager to hold numerous activities at the school, and he invited many people from the county to attend. The newspapers often announced school events, such as the school-anniversary celebration, school concert, photographic exhibitions, etc. With only a small staff to host activities for the whole county, Ms. Chen said, “You can imagine how much work we need to do.” The faculty had to forfeit instruction time daily for planning meetings on how to present the extra-curricular events successfully. Teachers became responsible for administrative work instead of teaching. Students, too, had to spend time developing and practicing for the events. Time for teaching and learning was usurped. Ms. Chen argued, “What is the purpose of these activities? They are neither for the students nor the teachers. They are worthless if they sacrifice our students’ right to learn.”

Another school policy instigated by the principal was to provide the opportunity for Indigenous students to learn their cultural heritage. Ms. Chen believed, however, that the school leader did not put much value on it. The school hired some Indigenous people from the community to teach traditional Indigenous art and music, such as clay, embroidery, and pan flutes. However, students studied those skills for

only one semester, so they quickly forgot what they had learned. Without consistency and a long-term program, Ms. Chen believed, “It’s impossible for students to have a deep knowledge of their culture.”

### *The Classroom Context*

Ms. Chen had taught the students in her fifth-grade class for three years—ever since they were third-grades. Her class consisted of nineteen Indigenous students: thirteen males and six females. It was a racially mixed class, with the fourteen Indigenous students from the tribe of Puyuma, one from the Bunun tribe, one from the Amis tribe, and three Han Chinese. Among their parents were a police officer, farmers, truck drivers, laborers, and mechanics. The parents of three students were unemployed and their family registered as low-income. Eight children lived in single-parent households.

Ms. Chen’s classroom instruction began at 8:30 a.m. and continued until 4:00 p.m. She taught the major subjects, including Chinese, mathematics, art and humanities, physical education, and the flexible curriculum<sup>7</sup>. A full-time intern from the teachers college worked with her. Usually the intern observed Ms. Chen’s teaching, but sometimes she helped design the curriculum and lesson plan, and sometimes Ms. Chen allowed her to teach.

Ms. Chen’s classroom was on the first floor, on the right side of the school building. It was large, square, and clean. Large windows with iron grating were on

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<sup>7</sup>The flexible curriculum, which took 20% of classroom sessions, was designed for the flexible use of schools and teachers. For example, schools could use the time to develop school-based activities that met the needs of the school. Teachers could use it to prepare curricula and teaching materials or tend to the needs of students, such as individual instruction and remediation (Taiwan Ministry of Education, 2006b).

two sides of the room. Two doors were on the left side of the room. Close to the front door was the intern's desk, holding a variety of textbooks and instructional guides. Near the back door was Ms. Chen's desk, with accumulated students' workbooks on the top of the table. Next to the teacher's desk a telephone hung on the wall, primarily to receive school administrators' calls. Ms. Chen also gave parents the phone number, inviting them to call whenever necessary.

A blackboard stretched across the front of the room. Two television sets hung from the ceiling at each end of the blackboard. On the right wall was an enclosed cabinet stuffed with cleaning supplies. Ms. Chen said that the classroom was neat because she clearly explained her expectations and the students clearly understood their responsibilities for taking care of it. Once, when a piece of cloth was left on the top of the cabinet, Ms. Chen immediately ascertained who left it and asked him to take his responsibility more seriously.

The students sat in four groupings in the center of the room. Three groups had five students each, and one group had four students. On the top of each group's table were several small containers holding various implements for drawing and writing: pencils, markers, rulers, scissors, glue, and colored pencils. Ms. Chen allowed each student to spend \$100NT (approximately \$3US) jointly buying school stationery and drawing instruments. Her purpose was to let students share the resources together rather than bearing the cost for them individually. If students could not afford the expense, she would pay for them.

A carpeted area, called *the learning corner*, was just behind the students' seats. It was furnished with one small wooden table and several pillows. Enclosed wooden

bookshelves divided the area from the students' seating areas. They were filled with storybooks. Whenever they wanted to read, the students could check out any of the numerous storybooks from the bookshelves. Ms. Chen stated her purpose for designing this corner. "I try to make it warm and cozy and make reading comfortable and fun. It is a place for students to read and relax during breaks."

A bulletin board displayed the students' colorful creations on the back wall of the learning corner. Ms. Chen referred to her classroom as a small gallery. She believed that having a place for students to exhibit their work helped make them feel proud and important. A small box hung at the right corner of the bulletin board. It was a mailbox, Ms. Chen explained, to help the students to share their problems and feelings with her. It was not used much, however, because most students readily talked to her face-to-face or by e-mails through the Internet, rather than by writing letters.

### *Summary*

This section covered Ms. Chen's personal history and educational background, as well as her teaching environment. Ms. Chen showed a sincere love of her students, which was the foundation of her dedication to teach them. She was a strong, self-confident teacher. Her confidence came from a sense of self-worth as a teacher, as she saw her students making progress under her instruction. Although she did not have academic training for teaching Indigenous students, she did have a practical internship that steered her belief and actions toward continuing study and professional growth.

This section also identified Ms. Chen's school context, consisting of the school environment, demographic data, the school culture, school leadership, and school policies. Dream Elementary School was a spacious, beautified environment for a conservative school culture in which the contented teachers lacked the motivation to change. Ms. Chen saw her role as a stimulator in the school. She collaborated with an Indigenous teacher and continuously improved her teaching skills, hoping to influence other teachers to improve theirs. In addition, Ms. Chen felt that the principal overvalued the school's reputation and hosted various events that were unrelated to teaching and learning, thereby sacrificing students' opportunities to learn. She also felt that the principal did not truly value the development of the Indigenous culture, as cultural learning tended only to the superficial and the short term and neglected the essence of its heritage.

Ms. Chen's classroom was characterized as a gallery; the students, as artists. Each arrangement in the classroom expressed her consideration of her students' creative needs. Each student had responsibilities to fulfill to ensure that the classroom stayed neat and orderly. Because most of her students' families were poor, Ms. Chen paid for some of the resources for their reading, writing, and drawing in the classroom. Regardless of their economic status, however, she tried to respond to their need to be recognized for their accomplishments. For example, she designed a bulletin board for showing their creations and appreciating each other's work.

## The Education of Indigenous Students

Four prevalent themes can be identified in Ms. Chen's beliefs, knowledge, and practices related to the education of Indigenous children: set individual goals, treat students equally, develop their multiple talents, and guide their behavior.

### *Set Individual Goals*

Ms. Chen believed that all students were capable of learning, but that they learned at different rates and achieved at different levels. On their tests some students scored over ninety per cent; others, lower than sixty. Because of the wide range of achievement, Ms. Chen believed that her job was to meet students where they were and strengthen the capabilities they already possessed. Accordingly, she held different expectations for them, drawing upon her knowledge of their achievement. She explained:

For students who score only sixty per cent we expect seventy. It's reasonable because they have so much room for improvement. But if we expect them to achieve one hundred per cent, it's unreasonable, and perhaps impossible. They would not enjoy learning because they would succeed only barely.

Ms. Chen expressed her philosophy of setting reachable and realistic goals for students according to their achievement. It provided the opportunity to progress and experience success. She set up a reward system to further motivate students toward their learning goals. Student rewards of honor cards depended on achieving their individual goals—test scores ranging typically from seventy to ninety per cent.

Ms. Chen worked with an intern to create homogenous groupings, based on students' academic performance. The top five students sat in one group. Also, there were two groups of mid-level students, and a group of low-achievers. Typically, Ms.

Chen presented the regular course material to the class, then the intern led the upper groups with supplementary work, and Ms. Chen guided the low achievers in remedial and individual instruction. Ms. Chen explained her reasons for the differentiated groupings.

I have used heterogeneous groupings before, mixing the high achievers with the low. The high achievers have often become the leaders and decision makers. Low achievers have often felt inferior in the group. Moreover, I have had to slow down my instruction, waiting for the slower learners. That was unfair to the high achievers. So, I tried a new strategy this semester. I worked with the intern to establish homogenous groupings. I found that homogenous groups allowed everyone to make an equal contribution in the group, and the high achievers don't need to lose time waiting for the low achievers. They can move on to learn more about the subject with the intern. I can spend more instructional time with the middle- and low-achieving students.

When working with the lower groups, Ms. Chen made sure she reinforced the learning process by praising students' successes and raising their self-confidence. For example, Gi was one of the slowest learners in the class. His grade was rarely over sixty per cent when he was in the third grade. Working with Gi individually, Ms. Chen noticed the good handwriting in his workbooks. She grasped the opportunity to commend him and boost his confidence to learn well when he made the effort. She also told him that she expected his best. As a result of her continuous reassurance and encouragement, Gi's performance rose to the middle level. As Ms. Chen phrased it, "The more you believe in your students, the more confidence they have. The more approval you give, the better they do."

#### *Treat Students Equally*

Given the wide range of achievement among Ms. Chen's students, some high achievers looked down upon poor achievers, lowering the latter's self esteem. To

improve students' attitudes, Ms. Chen reminded them frequently about the importance of respecting strengths and weaknesses.

Everyone has certain advantages and deficiencies. Some children are good at academic work; some at art or sports. There is no universal good or bad, right or wrong. We all need to respect each other. Your advantage in one aspect does not mean that you are better than anyone else. Someone's lower academic performance does not mean that he or she cannot succeed in the future. Never belittle someone's potential; one's future is unpredictable.

Ms. Chen saw potential in every student, and she lectured her class about the virtue of not labeling peoples' superiority or inferiority. She stressed the importance of protecting other students' feelings when assigning them different expectations and placing them in class groups. She clearly explained her purposes to the class:

Why someone scores eighty per cent, I say that he is good. So, when you achieve ninety per cent, why do I say that you still need to make a greater effort? Is it because I favor someone more than you? No. It is because everyone is different by nature. If I set the same expectation for each one of you, is it fair? For example, Wei is good at running. He can run the circle in one minute. If I asked all of you to run as fast as Wei, how would you feel? You would feel that I am asking you to do something that you can't do it. On the other hand, if I asked Wei to run it in three minutes—as slow as you—he would not be challenged to improve. That is why each one of you receives your own expectation level and is assigned to your group. I hope you can reach your own goal and make the effort to succeed, rather than competing with others.

Ms. Chen understood that each child wanted to be recognized and valued as an individual by the teacher. Therefore, she made sure her students understood that her groupings and personalized expectations were based on their achievement and made in the interest of their development. She stated that she did not favor students because of their performance or their families' status. Her love for each of them was the same. No evidence indicated that students were upset by Ms. Chen's arrangement; rather, they seemed to agree with her and accept the arrangement.



Ms. Chen's commitment to avoid labeling students stemmed from one of her own educational experiences. Her fifth-grade classroom teacher and art teacher treated students unequally. Rich students had the privilege of receiving supplementary instruction. Ms. Chen resented the unequal treatment she received because two of her teachers had labeled her to reflect her family background. Therefore, she resolved to never be such a teacher. She resolved, "I treat each one of my students lovingly. I would never put a label on my students; I would treat them equally." She summarized, "It is very important. If you were to favor some students because of their performance or background, the class would feel it. They would lose trust in you."

#### *Nurture Students' Talents*

Ms. Chen discovered that Indigenous students have notable talents beyond academic prowess. In art they display sharp color perception; in sports, nimbleness and agility; and in music, a keen sense of rhythm. However, she pointed out that school valued only students' academic performance and ignored the development of other abilities and talents. Consequently, she felt, "students are bookworms. The only thing they know in their life is study." She believed that developing students' multiple talents was as important as academic learning. Her goal was to convince her students that they had a valuable gift within them that they needed to discover and develop to the fullest.

Ms. Chen's goal to develop students' extra-curricular talents stemmed from her schoolgirl experiences. When she was young, she had great interest in developing various skills, such as art and sports. Fortunately, she met two teachers who

recognized and nurtured her interests. One was her physical-education teacher in the fifth grade; the other, her art teacher in the junior high school. Both directed Ms. Chen's progress and took her to many competitions. They encouraged her, whether she won or lost. With their encouragement and her accumulated competitive awards, Ms. Chen developed confidence in her specialties. Eventually, she chose art as her major field and teaching as her career because of her interest in both.

Because she had personally experienced the rewards from being encouraged to develop her talents, Ms. Chen provided students every possible opportunity to discover their interests and improve their talents at school. For example, she encouraged them to attend classes and activities, such as sports training, animated cartoon-creation courses, and classes for learning chess, pottery making, music, and story telling. If a student could not afford a participation fee, Ms. Chen would pay it if the student was truly interested in learning.

Ms. Chen pointed out that developing their talents was an opportunity for students to understand and express themselves outside of their academic lives. A former student, Ka, was a prime example. He came from a violent family and had behavior problems. He gave up on learning and became the school's biggest troublemaker. However, Ms. Chen never gave up on Ka and tried to find ways to help him. She found that he had a true interest in and talent for sports. Therefore, she invited him to join her athletic team and trained him in the high jump. Ka practiced faithfully and won many awards for the school. He became a school hero. His athletic achievements increased his self-esteem, which, in turn, increased his academic motivation and his self-control. As Ms. Chen said,

The development of students' talents provides them an escape from academic failings. Their success in developing their talents proves that they are not worthless. They find that they can do something well. It also provides them an opportunity to return to academic learning. It proves that they are not stupid, and that they are good at learning, as well.

Ms. Chen believed that her students were proud of being themselves because of her development of their talents. Li was another successful example. He had a keen interest in drawing and expressed his strong desire to learn more about it. Ms. Chen tried her best to help Li learn art. She went to school every Sunday to give him individual instruction. She also helped him enroll in a national competition. Li's entry was selected as one of the top five paintings in the competition, and he was rewarded a trip to the Netherlands. Ms. Chen said that Li's success was not only a personal honor, but also an incentive to the Indigenous students in the school. She summarized, "Li is the model. Because of Li, students know that anything is possible, if only they make the effort in what they are good at."

#### *Guide Students' Behavior*

Guiding student behavior toward becoming "decent persons" was at the core of Ms. Chen's teaching philosophy. *Decent persons*, by her definition, meant, "behave appropriately, and get along with others." Ms. Chen believed that guiding student behavior was a teacher's most important job. She used a metaphor to explain:

I am like a potter. Students are my clay, which I must mold carefully. If I fail to pay attention to one detail, the pottery will always have a blemish. If I don't carry out my responsibility to guide my students' behavior today, they will make many mistakes in the future.

Observing her students' behavior and providing immediate guidance was always Ms. Chen's highest priority. There were times when she diverged from

teaching the curriculum to correct a student's behavior. For example, from the time scheduled for an arithmetic lesson, she once used approximately thirty minutes to deal with two students' threat to fight with others after school. She said,

I am very flexible. If something happens in the school day, I will stop the lesson and investigate the incident. I will let the children talk about it and guide their behavior. I believe that there are a lot of lessons that are not in the textbooks that need to be taught.

As Ms. Chen dealt with students' problems, she demonstrated authoritative, disciplinary stances. Her voice and facial expression conveyed serious concern. When she was upset, everyone in class gave her their rapt attention. The classroom atmosphere was seriously silent with only the teacher's voice. Ms. Chen explained to me her objective, "Only when you treat their behavior seriously will they know the seriousness of their conduct."

Ms. Chen had *assertive discipline*. She explained the rules and consequences to her students and followed them diligently. For example, she prohibited students from going to the local Internet coffee shop because gangs gathered there. She clearly told students they would have to clean the streets if they violated the rule. Nevertheless, some students violated the rule, playing Internet games until midnight. True to her word, Ms. Chen took the students to clean the streets every day after school. Understandably, no more students went to the Internet shop. Ms. Chen summarized the message: "When a rule is broken, you must act decisively. Never threaten without following through; otherwise, students will not follow your rules."

More importantly, Ms. Chen listened to and talked to students before and after administering a punishment. It was a strategy she learned from her mother. Before

rendering a punishment, her mother would listen to her daughter's explanations. Then she would make sure that her daughter understood why she was being punished. Applying that same strategy, Ms. Chen listened to each pupil's account of an incident. Then she explained what needed to change and clearly detailed her expectations.

After a punishment, she had a follow-up, private talk with transgressors. She told them again why they had been punished. Her lecture was patterned: "I punished you because of what you did, not because I do not like you as a person. I still love you. What I do not like is your misbehavior." The students did not show any resentment of Ms. Chen's interactions; rather, they joyfully surrounded her and shared their feelings with her, even after punishment. Later, discussing her disciplinary practices, Ms. Chen elaborated: "If a teacher does not ensure students understand why they are being punished, they will assume that the teacher does not love them anymore." She said that students did not feel rejected by her, because she cared about their feelings. They were motivated to improve their behavior because they knew that what she did was for their benefit and improvement.

Ms. Chen had various solutions for misbehavior, depending on who did what. Lin, for example was the object of a particularly unusual approach. Lin would laugh at anyone who was suffering. Moreover, when she became angry, she would pound on the table and bang her chair. Trying to understand such bizarre actions, Ms. Chen believed that Lin's behavior was a reflection of her family situation.

Lin's parents are divorced. Her mother works very late to support the family, so she has little time to be at home with Lin. Moreover, because of her mother's irregular job, Lin has often had to transfer among schools. Therefore, she cannot have a long-term, close relationship with her teachers and classmates. Neither does she know how to treat others.

Ms. Chen understood some of the reasons behind Lin's frustration and anger and the outbursts that followed. She helped Lin correct her behavior. She discovered that Lin did not like for teachers to directly correct her misbehavior, so she used an indirect approach—storytelling. She selected literature that depicted situations similar to Lin's, containing characters with whom Lin could identify. She discussed the stories with Lin, and they began to share their thoughts about them. Eventually, Lin started feeling comfortable with Ms. Chen and listening to her teacher's advice.

### *Summary*

This section covered Ms. Chen's beliefs, knowledge, and practices for the education of Indigenous students. It also identified factors that impacted her beliefs, knowledge, and practices.

Ms. Chen believed that Indigenous students were capable of learning. She also knew where her students ranked in the class, and she helped them work above their current levels of performance. Key to her methodology was differentiated expectations and homogenous study. She also used rewards and continuing encouragement to motivate students toward their goals.

Remembering that she experienced unequal treatment from her own teachers because of her disadvantaged background, Ms. Chen refused to be that kind of teacher. She rejected student-labeling of superiority or inferiority in the classroom, based on social class or economic status. She helped students respect others, regardless of their disadvantages and handicaps. She tried to fulfill all her students' needs to be praised, encouraged, and worthy, and she treated them equally, without prejudice.

Ms. Chen realized that some Indigenous students had outstanding talents in sports, music, and art. She spoke passionately about looking at their strengths and building upon them. Her enthusiasm for her role also stemmed from her own teachers, who helped her develop her talents in art and sports. Similarly, she encouraged students to discover and explore their own interests. She also provided them with experiences and resources to help develop their individual talents.

Ms. Chen stressed the importance of guiding students' behavior to make them respectable citizens. Her disciplinary strategy employed firm and authoritative explanations when imposing consequences. Nonetheless, influenced by her mother, Ms. Chen cared about her students' feelings; she listened to and talked with them before, during, and after administering punishments. Sensitive to each individual student's personality and personal circumstances, she employed different disciplines for different students, depending on a given student's needs.

### Curriculum and Instruction

This section focuses on Ms. Chen's outlooks on curricula and on students' learning difficulties. It also outlines the teaching strategies employed by Ms. Chen to facilitate students' learning and to overcome difficulties. The section is subdivided into four parts: cultural interaction and instruction, key-word instruction, differentiated reading groups, and art-integrated writing.

#### *Cultural Interaction and Instruction*

When asked to identify her students' learning difficulties, Ms. Chen thought for a few seconds and answered, "content comprehension." Based on her three years of experience with her then-current students, Ms. Chen believed that their difficulty in

comprehending the substance of their class work was owing to their dearth of experiences that related to the subject matter. There was, for example, an arithmetic problem: “What would you buy if you had one hundred dollars?” (\$100NT, approximately \$3US) Ms. Chen said that some of her Indigenous students could not answer the question because they barely had any buying experience, owing to their poor financial situations. She explained, “They haven’t had money experiences, so they don’t easily make the buyer connections.”

Ms. Chen argued that the mandatory curriculum did not provide the methodology to accommodate Indigenous students’ needs. Still, teachers could at least do some things to compensate for the gap between the mandatory curriculum and the students’ experience. Her methods of compensating involved increased cultural interaction and culture-based teaching.

Ms. Chen provided her students with opportunities to learn about people and ideas from different cultures. She believed that providing her students with cultural stimulation would make them more receptive to comprehending the contents of the curriculum. So, each semester she took them to Taipei to give them the experience of traveling to other places, such as museums and shopping centers. Particularly, with the school’s support, she arranged with teachers from Taipei an activity of cultural interaction. Her students visited a Taipei elementary school for three days. They learned about family and school life in the city. A few weeks later, the city students came to the Dream Elementary School. Ms. Chen and her students hosted them and introduced them to traditional Indigenous culture and living. The cultural interaction allowed her students to experience the prosperous city life, as well as the hectic and



stressful school life of the city students. Ms. Chen believed that those experiences made them better appreciate their beautiful environment and unique cultural situation. In short, the cultural interaction broadened the students' views of the world and increased their understanding of others, as well as themselves.

Ms. Chen pointed out that the cultural background of her Indigenous students was different from that of the Han Chinese teachers and students. She believed that teaching should incorporate students' own cultural backgrounds into the curriculum and instruction in order to facilitate their understanding and to stimulate their learning interests. Observations in her classroom did not reveal any specific instructional activities that illustrated her expressed beliefs. She explained, "There simply is not enough of time. There is a lot of administrative work for me to do. I do not have the opportunity to create holistic lessons for my students."

In interviews, Ms. Chen described some previous activities. For example, when teaching Chinese Literature, she encouraged students to write stories about the Puyuma tribe and then to role-play the stories. Similarly, when teaching a social studies unit in the fourth grade, she led the students to conduct an in-depth study of farm tools. The study required students to work as a group to locate existing farm tools in the community. They searched the information from the community members and in the library. They shared their knowledge on the topic whenever class members found tools, following their maps of the community. Lastly, in the art and humanities, Ms. Chen cooperated with the Indigenous teacher and Indigenous parents to provide instructional activities for students to learn about and celebrate their own heritage. Those activities included drawings of tribal life, embroidery and clay-modeling

instruction, and instruction on traditional Indigenous songs and dances. Ms. Chen concluded, “These culture-related projects increased Indigenous students’ understanding of their community and culture. They also allowed Han Chinese students to understand a culture that differed from their own.”

### *Key-word Instruction*

When further asked about how she perceived the arithmetic curriculum, Ms. Chen stated that the content of the arithmetic textbook was simple for most of her Indigenous students because it provided clear, step-by-step guidance. However, the workbook problems were too complicated for her lower achievers. She believed that their greatest need was comprehension. She said,

They do not have problems with simple calculations, but they have difficulty understanding the narrative arithmetic problems. Because of their lack of reading, they cannot make the connection between words and their meaning. They can word call correctly, but they do not understand what they have read.

At the time of this study Ms. Chen had started developing a new strategy to help the students understand the problems posed in the curriculum. Her strategy was based on *key-word instruction*, which she demonstrated. She told the students to circle the key words in the problem. With the key words in the students’ minds, she guided them step-by-step to the solution. For example, in the unit called “The Four Fundamental Operations of Arithmetic,” one problem posed was, “There are 30 apples in a box. A businessman divides 6 boxes into 15 packages. How many apples are in one package?” After reading the problem, Ms. Chen asked Gi to identify the key word in the problem. Gi thought for a few seconds and answered, “Divide.” She looked him and said, “Very Good. How do you calculate the key word, ‘divide’?” Gi

replied, “by division.” She said, “Good. How many apples did the businessman have before dividing them into small packages?” Gi answered, “30 times 6.” She said, “Okay. Now you tell me how to solve this problem.” Gi looked at the teacher a few seconds and answered, “30 times 6 and then divided by 15.” Ms. Chen praised him for his correct answers.

After the whole class instruction, Ms. Chen let students practice the problems in the workbook individually. She walked to Ni’s seat and guided him to solve the problem. She asked Ni to read the problem, “Pei had 67 stamps originally. Her brother gave her another 29 stamps. She mailed away 55 stamps. How many stamps does Pei still have?” She asked him to identify the key words in the problem. Looking at his book, Ni said, “How many stamps are left?” Ms. Chen said, “Good” and asked him to solve the problem. After pondering the question, Ni said that he could not solve it. She immediately responded, “I think you can. Look at the problem carefully. The brother gave her 29 tickets. What is the key word?” Ni said, “gave.” She said, “OK. How do you calculate the key word ‘gave’?” Ni answered, “use addition.” She further asked, “Pei originally had 67, now her brother gave her 29 stamps. How to do so far?” Ni said, “67 adds 29.” She said, “Good, then what do the key words ‘mailed away’ mean?” Ni said, “subtraction.” She guided him, “Good. Now you tell me how to solve this problem.” Ni answered, “67 add 29 and then subtract 55.” Reassuringly, Ms. Chen told him, “See, you can do it. It’s not difficult for you. Use your mind to read carefully and find the key words. You can solve the problem.”

According to Ms. Chen, Gi and Ni were two of the slower learners in the class. Both of them had difficulty grasping the key points in the narrative problem. They

often failed school tests and did not have much confidence in solving the problems. Most of the time, they relied on the teacher to tell them the answers. Ms. Chen was supportive of her students, helping them learn during guided practice and independent practice. She encouraged them to use the key-word skill to solve the problem. Her encouragement and key-word guidance helped them develop the basic skills in the context of thinking and analyzing rather than waiting for the teacher to supply the answer. These strategies also helped Gi and Ni know what to expect and hence calmed their anxiety about not knowing how to solve the problem.

### *Differentiated Reading Groups*

Another learning problem that Ms. Chen identified was students' lack of reading. Consequently, they had trouble understanding the abstract content in the textbooks, whether poetry or prose. In an effort to expand her students' vocabularies and increase their knowledge—and thereby to improve their reading comprehension—Ms. Chen encouraged them to read storybooks, and she introduced them to literature of various genres. She was dedicated to the goal that all the students at her classroom would develop the reading habit and the desire to want to read.

Ms. Chen realized that her students had varied interests and different levels of reading abilities. Some students could read novels without difficulty but others could read only simple storybooks. With a zeal for trying new things, she decided to develop *differentiated reading groups*. She believed that homogenous groupings would allow the teacher to improve the reading instruction and, at the same time, provide resources appropriate for the children's abilities and interests. With the cooperation of the third-grade teacher, the Indigenous teacher, and two interns from

the third and the fifth grades, she divided the third- and fifth-grade students into five groups according to their reading levels. Each teacher took charge of one group. They met on Wednesdays, during professional development time, discussing the teaching plan for each group. They used the first two classes of the flexible curriculum to implement the reading instruction on Thursdays. For the third session of the flexible curriculum, the students returned to their respective classrooms. With the help of the two interns, Ms. Chen divided her students into three groups, based on their reading levels. Ms. Chen led the lowest-ranked group; each of the higher groups was led by one of the interns.

According to Ms. Chen, the goal of the reading instruction was to guide students to read broadly and to share their reading experiences with others. The teachers hoped that the students could ultimately create their own stories. Ms. Chen provided her students with reading materials selected to correspond with their reading levels. Students selected books that they considered meaningful and informative. The teachers helped the students understand what they read and had them share it with others. By reading and sharing, the students had opportunities to hear diverse opinions and express their own ideas—which built their confidence both as readers and as speakers. For example, Ms. Chen said, “Long was a very shy boy in the third grade, rarely expressing himself.” She asked Long to search for jokes in his readings and on the Internet and to share the jokes with his group. She also encouraged her group members to give him feedback. Inspired by Ms. Chen and the group members, Long lost his fear of speaking up. He was even responsible for a talk show at the school’s anniversary celebration.

Unfortunately, Ms. Chen's reading-instruction program was interrupted by extra-curricular school activities. Ms. Chen said that most of the school's flexible curriculum was rearranged for swimming training and school-anniversary rehearsals. As a result, the reading instruction was temporarily suspended at midterm. Ms. Chen was still very positive about the program. She said, "There are many things that I cannot anticipate. At least, I had the opportunity to try out my ideas." Ms. Chen said that she would continue to use reading differentiation next semester, and she believed she would do it better because of her initial efforts.

### *Art-integrated Writing*

Ms. Chen pointed out that her Indigenous students seldom passed their Chinese vocabulary tests. She believed that their failure to memorize the words was caused mainly by laziness. "I have taught them the words several times; they just don't remember them. You can see that they repeatedly make the same errors. They do not pay attention." Her students also had difficulty writing longer sentences and simple compositions, and punctuation was a perennial problem. "They do not have problems speaking, but when they try to write sentences, they lack a sense of where to put the commas and periods."

Drawing on her expertise in art education, Ms. Chen incorporated drawing into her writing instruction to help the students learn words, sentences, and composition. For example, Ms. Chen's students made their own word cards for the words assigned in each unit. Each card included two parts. On top of each card the students wrote the word, paying particular attention to its structure and spelling. Beneath the word they wrote a sentence, drawing a picture based on the sentence. They attached their word

cards to the blackboard, and Ms. Chen guided the class past the display, looking closely at each card. They discussed the words, sentences, and pictures. For example, when teaching the word, “egret,” Ms. Chen pointed at Ni’s card and said, “I see that Ni’s card making has improved considerably. You see, the word is written very neatly. The drawing is creative.” A student said, “It looks like a cartoon.” Ms. Chen responded, “Right. Maybe one day Ni will become a cartoonist.” Ni looked at the teacher and smiled. Ms. Chen read Ni’s sentence, “We can see pretty egrets in the field around the school.” Another student said, “I saw an egret before. It is very pretty.” Someone else said, “I heard a joke. The biggest difference between a foreigner and a Chinese is that, when he sees an animal, a foreigner will say that it is very pretty; a Chinese will think about how it tastes.” Ms. Chen and the students all laughed. She said, “We Chinese should learn to protect animals instead of eating them.” She praised Ni for making a good sentence and commented on his drawing, “You drew very well. Let me give you a suggestion: your picture will be more visible if you can use a white wax pen to paint the egrets, since your card is pink.” Ni smiled, “Right. I did not think of that when I was painting.” Ms. Chen smiled and said, “Now you have learned.”

During our interview, Ms. Chen explained why she used word cards to teach Chinese words. She explained, “Chinese words have a unique structure. Each word is like a specific, beautiful picture. I want the children to use their imagination to appreciate the words.” Specifically, she said that transferring words and sentences into pictures is a process of thought, analysis, and synthesis. The process requires students to use their imagination to make colorful words, sentences, and pictures, as

well as to present them to the class. That process of creating and presenting, she believed, helped students connect word structure and meaning with an image. It also promoted students' understanding and interest in learning the words, as well as increased their memorization of the words.

Ms. Chen also integrated art with more advanced writing skills, such as journals, poems, short compositions, and little books. She told her class to draw what they wrote. For the creation of their little books, for example, she selected the topic of the first book, "My life." Using their imagination, the students wrote about and drew pictures depicting their years from birth to death. When Ms. Chen saw errors in punctuation, she asked the writers to read their sentences aloud to see where to pause and where to insert punctuation to make the sentences fluent.

The students displayed their work in the school showcases and on the classroom bulletin board. Ms. Chen explained, "You have to give children opportunities to show their work so they will take it seriously." Indeed, her students were enthusiastic about their work. They became engrossed in their projects. Even during breaks, some students continued to work on their little books or to check with Ms. Chen on their progress. They also proudly showed their work to parents, teachers, and other visitors to the classroom.

Ms. Chen stressed the need for tact when dealing with students' creations because they were very sensitive to the teachers' every comment. Ms. Chen often encouraged students, both privately and publicly. Then she gave them advice on how to do better. Her goal was to help students refine their skills without discouraging them. Ms. Chen's final assessment was, "Art-integrated writing gives students a



strong sense of accomplishment—and me, too, as the teacher who guided them—especially when seeing their creativity and joy in learning.”

### *Summary*

This section described Ms. Chen’s beliefs about and knowledge of curricula and students’ learning difficulties. It illustrated her teaching strategies to improve students’ learning.

Ms. Chen knew her students’ cultural backgrounds and realized their weakness in reading comprehension. She believed that education should expand students’ life experiences but also connect with their cultural backgrounds. Her methods included arranging cultural interaction activities with a city school to broaden her students’ perspectives. She also integrated culture-related activities into her subject-matter teaching to help students make connections between the curriculum and their own culture and traditions. However, she pointed out that her current administrative assignment occupied most of her time, which limited her ability to take advantage of extended learning.

Ms. Chen discovered that students had difficulty comprehending the problems posed in their workbooks. To deal with the problem she devised the strategy of asking students to circle the key words in arithmetic questions. She improved their understanding by teaching them to flag the key words and then to infer how to solve the problems. She also gave them encouragement, which helped them gain confidence in answering the questions.

Ms. Chen pointed out that students read too little, which contributed to their poor reading comprehension. She believed that increased reading resources and

opportunities would improve their reading ability and comprehension. She realized that her students had different interests and skill levels, so she took the initiative in establishing inter-grade homogeneous reading groups. With her encouragement, help, and reassurance, Ms. Chen believed that the students' reading, comprehension, and speaking improved, along with their self-confidence. Unfortunately, her reading instruction experiment was interrupted by mandatory extra-curricular activities, but she remained optimistic about the idea and planned to resume it in the next semester.

Ms. Chen perceived that her students' writing problems related to their laziness in memorizing the basic words, incorrect punctuation, and a lack of the fluency in writing long sentences and compositions. Drawing upon her expertise in art education, she integrated art with writing instruction to improve her students' writing ability. She encouraged students to draw as they wrote word cards, journals, poems, compositions, and their little books. Whether or not the children performed well, she often expressed her appreciation and approval. As a result, her students enjoyed the process and were proud of their accomplishments.

#### Indigenous Family Relations

Having taught the same children in grades three, four, and five, Ms. Chen had considerable information about each child's family. She firmly believed that Indigenous parents' laissez-faire educational attitude and family circumstances directly affected their children's learning attitudes and achievements. In approximately one-fourth of the community, parents cared about their children's education and maintained an intact family. Their children had positive learning attitudes and above-average achievement. By contrast, students from families that

made up a large majority of the community had lower motivation and achievement, and they often suffered such emotion-scarring circumstances as uncaring parents, broken families, and poverty-rooted lives. To communicate with such a range of parents and to meet students' differing needs, Ms. Chen saw herself functioning sometimes as a friend building bridges between the parents and the students, sometimes as a mother establishing close, personal relationships with students, and sometimes as if she were a coach drilling students on the virtue and value of working hard and of being self-sufficient persons.

#### *Build Bridges between Parents and Students*

When Ms. Chen realized that some of her high-achieving students showed conversely low self-esteem, she talked to them—and listened to them—as a friend and learned that their problems frequently stemmed from their parents' demands for excellent performance. They were not allowed to fail school tests. Because of all the stress, the students could not enjoy learning and often worried about their performance. For example, Li was one of the outstanding students in the class, but he lacked self-confidence. His father, a police officer, would blame Li whenever his grades were less than perfect. His father's high standards caused Li's high stress. He felt nervous when facing tests. He told Ms. Chen that he loved and honored his father, that he was afraid his father would feel disappointed if he knew Li's feelings.

Understanding Li's fear, Ms. Chen immediately made a home visit to talk to Li's father because she believed face-to-face meeting was the key in getting to know each other and clarify the problem. She began by praising Li's schoolwork and behavior. She followed by observing how much Li admired his father and relied upon

him for guidance. She began to describe the boy's problem only after she had gained the father's trust. She told him how much his demands affected his son's learning and self-confidence. The father was receptive to Ms. Chen's report and began to own his feelings. He said that he rarely praised his son because he was afraid that Li would become arrogant. He admitted his lack of understanding of his child and expressed his appreciation for Ms. Chen's advice. Afterward, Li's father bought him a badminton racket as a reward for his high achievement. Ms. Chen glowed, "You could not describe how excited Li was. His father's confirmation meant everything to him. I am glad that I became the bridge of understanding between Li and his father."

In another case, Ms. Chen found that Ming acted differently and seemed very unhappy. Ms. Chen talked to her and found that she had run away from home and was living with her grandparents. She was escaping her mother's reprimands and punishment for getting a low grade on her mid-term examination. After listening to Ming's story, Ms. Chen scheduled a meeting with Ming's mother. When her mother could not keep the appointment, Ms. Chen telephoned her. Ms. Chen wanted to get the mother's perspective and to convey Ming's feelings. Ms. Chen explained that Ming needed her mother's comfort and encouragement rather than criticism for failing tests. Ming's mother said she loved her daughter but did not know how to express her love. After talking to the mother, Ms. Chen told Ming that her mother loved her, and that she demanded so much because she thought it was best for her. By serving as the communication link between Ming and her mother, Ms. Chen brokered a mutual understanding that healed their relationship. She said,

I have to build the bridges. If I don't, parents will fail to understand their children. They often treat their children unwisely. However, for the

communication process to be successful, I have to build trusting relationship with students and their parents. I let my students feel safe with me and feel free to express their needs. Also, I have to let their parents understand what I try to accomplish. If they know what I do is for their child's good, they are willing to give me support.

### *Establish Caring Relationships with Students*

Ms. Chen pointed out that the reward for teaching Indigenous students was the enjoyment of receiving the respect and trust of the students' parents. They gave to teachers the autonomy to teach without intervention. However, that trust became a liability when a teacher tried to involve parents in their children's education. Many parents took for granted the teacher's responsibility for educating their children. Ms. Chen cited Ni's and Gi's parents as examples:

Ni's father is a truck driver, so he is not at home very often. His mother is an alcoholic. Sometimes Ni stayed in the Internet shop until midnight. His parents did not know. I reminded them to pay attention to their son. They said that they were too busy. Gi is another example. He rarely submits his homework on time. I asked her mother to remind him. His mother said she was already trying her best and could do nothing more about the problem. However, when I visited their home, I learned that the mother stayed out gambling until midnight. She often leaves Gi at home alone.

Although Ms. Chen believed that some Indigenous parents were irresponsible, she believed that there were some factors affecting parents' involvement in their children's education. Many of them were poorly educated and did not realize the importance of parental involvement. Many parents struggled to provide the basic needs for their families, so they did not have the necessary time. Some parents did not even have a stable job or unemployment insurance, so their families were extremely poor. In such deprived circumstances, studying in the home environment was virtually impossible. Ms. Chen described the situation at Ya's home:

There is no table or lamp at home to help Ya to do her homework. Even worst, Ya's parents do not have money to pay the electricity bill. As a result, the electricity has been shut off for a long time. Ya must do her homework before sunset.

Ms. Chen was deeply saddened by the family condition of her students. "The more you understand their parents and their home life, the more you want to take care of them." She described her role as their surrogate mother, taking care of them as if they were her own children. Her caring behavior was seen in her everyday interactions with students. She engaged students informally by using touch and endearing names for her students, such as "little baby", "my honey", and "my dear." She regularly asked them how things were going at school and home during break. The students seemed to sense her genuine concern, and therefore liked to gather around her and share their stories.

In addition, Ms. Chen provided breakfast when students came to school hungry. She gave school supplies to the needy. When a student was sick, with no care-giving adult at home, Ms. Chen took the student to the doctor. She also came to school on weekends to help students wanting to learn and lacking parent assistance at home. She reassured the students, "No matter how your family turns out, I still care for you. I am always there for you."

#### *Teach Values to Students*

Ms. Chen believed that many Indigenous parents, unlike typical Han Chinese parents, did not teach their children the values needed for academic and character development—values of working hard and of being self-sufficient persons. To illustrate her point, Ms. Chen stated that many Han Chinese parents valued education.

They motivated their children to pursue academic excellence; consequently, their children were more active learners. By contrast, many Indigenous parents tended to be satisfied with their tribal life, hunting and farming. Some of them relied solely on government's support, without making a living for themselves. They did not feel a need for a high school diploma and did not have expectations for their child's future. Understandably, their children were not highly motivated to prepare for a different, independent future.

Ms. Chen believed that many of her Indigenous students lacked good educational role models and hence expectations for success from their parents. She felt that teachers were essential because they might well be Indigenous students' role model and only source of basic values and high expectations. As she said, "I am their role model. I make an effort to go to graduate school. I want them to see I am learning too. I really try to make each child feel that they can make it if they make effort."

Ms. Chen described her coach-like role, frequently reminding her students about the importance of making an effort in their studies: "If you don't make the effort to study, you will lose to your competitors, and you will be in the lower class in our society." She admonished her students to understand clearly what they wanted to do in life and to work hard toward those goals. She expected them to find good jobs and to have better lives, rather than staying in the tribe and isolating themselves from society.

Ms. Chen also taught students the value of being self-sufficient persons. Specifically, she recalled that her mother trained her and her siblings to be independent, so they could carry out their responsibilities. Impressed by her mother's

values, Ms. Chen, in turn, expected her students to also become self-sufficient.

Whenever they encountered difficulties, she expected them to make judgments and decide how to resolve problems. She gave them an example.

Two students once forgot to take home their workbooks. One telephoned me and said that she would write the assignment on a separate piece of paper and copy it the next day into her workbook. I told her that would be no problem. The other student told me the next day that he did not bring his homework because he did not have his workbook. Of course, the second student was punished because he submitted his work late and because he had not tried to think of a solution to the problem.

Ms. Chen tried to involve the children in recognizing problems and determining what actions should be taken. She also made sure that they understood that they were responsible for their own actions. She stated,

I am trying to teach children to be independent learners and problem solvers rather than just be told. I want them to know that their parents and teachers were not those persons to tell them all the answers. I want them to think and learn to take action and responsibility.

The students complied with her urgings, especially when she was out of the classroom. After recess they came back to the classroom quietly and began reading poems and English sentences collectively. They opened their textbooks without being instructed. If their teacher still had not come back from her meeting, they would work in their little books or read stories. They worked intently and quietly. The students were engaged to such high degree, Ms. Chen believed, because of her clear expectations. "They know what I expect. They are making progress. I see that they are becoming more self-monitoring and self-responsible without relying on my direction."



### *Summary*

Ms. Chen's classroom practices were guided by her beliefs about and knowledge of Indigenous family life. Because of her continuing relationships with her students, she knew about their families. She played the role of friend to solve students' varying problems, of mother to tend to their needs, and of coach to drill them on values.

Ms. Chen perceived that some parents demanded too much of their children, causing stressful relationships. She acted as the students' friend, giving attention to their problems. She contacted parents at home with visits and telephone calls to discuss their children's problems and to convey their feelings. She built the bridges of communication and understanding between the parents and their children.

Ms. Chen pointed out that many parents did not get involved in the education of their children. She believed that the parents' own poor educational backgrounds and their poor family circumstances contributed to their lack of school involvement. She knew about the impoverished conditions of her students, and she assumed a somewhat maternal role to help "her children" through their early school years. She focused her energies on supporting her students as much as possible—physically, emotionally, financially, and academically.

Ms. Chen felt that many Indigenous parents did not instill in their children the values of hard work and self-reliance. She assumed her coach-like role to teach those values to her students. She drilled the children on the importance of those values and clearly laid out her expectations, so they would know what to do. She also created an

orderly classroom, in which the children had the opportunity and responsibility to learn about duty.

### Conclusion

Ms. Chen's pedagogical practices reflected her commitment to facilitate her students' intellectual and social development. Her methodology was guided by her beliefs about and knowledge of herself, of education, and of Indigenous students and their families.

Ms. Chen perceived herself as a teacher capable of reaching Indigenous students. Her confidence stemmed from her sincere affection for her students and her desire to help them improve. She also had high expectations for herself. She kept herself and her teaching methods fresh and innovative. She strived to broaden her boundaries, and she introduced new methods for improved teaching effectiveness.

Ms. Chen recognized her Indigenous students' difficulty with learning the fundamental skills of reading comprehension, problem solving, and writing. She believed that those difficulties were caused mainly by four factors: the students' lack of the life experiences that were depicted in the curriculum, their lack of reading, their failure to memorize Chinese words, and a lack of parental support. On the other hand, she saw students as capable, intelligent children who learned at different rates and achieved at different levels. Assessing and reflecting upon the similarities and differences of her students allowed Ms. Chen to devise and implement plans for guiding them toward their potential. To reach her students at their respective levels, she created homogeneous groups and encouraged the children to stretch for higher placement. To improve their comprehension skills, she provided cultural experiences

that broadened the children's worldviews, yet allowed them to retain and strengthen their connections to their culture. To guide students' problem-solving abilities, she gave them context cues, helping them think of key words. To improve their literary skills, she created differentiated reading groups to better accommodate their different reading levels. She also shared her love of the arts with students and weaved them into her writing instruction. Moreover, she made learning resources available to the students to nourish them as readers, writers, and artists. Above all, support and encouragement, administered publicly and individually, were always at her center of teaching, in order to advance students' education and to increase their learning confidence.

In addition to academic support, Ms. Chen recognized that Indigenous children had a talent for sports, music, and art. She believed that her responsibility as a teacher was to develop their varied talents. She provided students many opportunities to pursue their interests. She also encouraged them to develop their talents.

Ms. Chen understood her students' behavior problems. She played the role of coach to guide their behavior and teach them values. She maintained an orderly classroom in which students complied with her expectations and took on responsibilities of their own. When problems arose or when unexpected events occurred that might be unsettling to the children, she was their friend, and she listened to them and talked with them. When they misbehaved, she gave them affirmative discipline and equal treatment and always respected and cared for their feelings. Moreover, she approached parents through home visits and telephone calls to discuss their children's problems and broker mutual understanding.

Ms. Chen showed her compassion for families' economic plight, and she sometimes acted as if she were the students' mother, helping to satisfy their needs. She used touch and endearing terms and reassured students of her care and concern for them. She provided breakfast and school supplies for students. She took them to see a doctor when they were sick and lacked parental care. She provided her weekend time to assist students with their schoolwork if they could not get help from their parents.

Analysis of accumulated data showed that Ms. Chen's educational experiences shaped her values and helped her formulate beliefs about and strategies for teaching Indigenous children. For example, unequal treatment from her own teachers reinforced her promises about not stereotyping or labeling students but, rather, treating them equally, regardless of their background. Her commitment to develop students' multiple talents stemmed from her being encouraged by her physical education and art teachers. Although Ms. Chen did not have academic training for teaching Indigenous students, her mother, her cooperating teacher, an Indigenous colleague, and her university professors were her main influences and mentors. From each she received knowledge, skills, and inspiration for teaching Indigenous students.

Ms. Chen's work as a teacher was both supported and constrained by certain unique factors. The primary supportive element was the collaboration of an Indigenous teacher. Through open dialogue and the free exchange of ideas, they collaborated to implement their creative ideas for team teaching and reading groupings. Their professional compatibility and understandings contributed to their success as collaborators.

The main constraining element was the school's conservative culture and leadership. The teachers were content with what they were doing and were intimidated by Ms. Chen's advanced learning and her inclination to change traditional practices. Ms. Chen, however, was relentless. She believed that her role was to be an innovator, to stimulate other teachers to improve, for the students' good.

As for the school leadership, Ms. Chen regretted that the inordinate number of school activities, mandated by the school leadership, promoted the school's reputation, but interrupted and consumed time needed for instruction. She also felt that the school did not adequately emphasize the development of the essential Indigenous-culture curriculum and instruction. Consequently, the students attained only superficial knowledge and skills.

## CHAPTER 6

### MS. KAO

The subject of this chapter is Ms. Kao, a teacher in a Taiwan city school. The findings in this chapter are organized into four sections: (1) Background and teaching context, (2) The education of Indigenous students, (3) Curriculum and instruction, and (4) Indigenous family relations. The first section covers Ms. Kao's personal and educational background, as well as the context in which she taught. The other three sections present Ms. Kao's opinions about the education of Indigenous students, her school's curriculum and policies, and the role of the Indigenous family in the education process. Ms. Kao's teaching practices, which were guided by her beliefs and knowledge regarding those matters, are reinforced. Ms. Kao's educational and other experiences that influenced her beliefs, knowledge, and practices are included in each section. Each section concludes with a summary of the findings.

#### Background and Teaching Contexts

This section documents significant aspects of Ms. Kao's personal and educational experiences, describing the influence of various factors such as her family, her student years, her decision to become a teacher, and her preparation for teaching Indigenous children. The section continues by framing the school context in which Ms. Kao taught: the school environment, demographic data, the school culture, and school policies. The section concludes by describing her classroom setting, including student information, teachers' schedules, and an explanation for her classroom arrangement.

### *Teacher Background*

Ms. Kao, a 42-year-old Han Chinese, was a native of Taitung City. Her father was a retired elementary-school principal and her mother was a housewife. Ms. Kao had four siblings. She felt blessed to be born into her loving family. Unfortunately, an accident occurred that changed her life. She suffered severe burns when she was one-year old. The burns left a large scarred area over her right arm to her hand, making her so self-conscious that she feared being close to people.

Her sensitivity worsened when she entered kindergarten. Her classmates refused to hold her hands when they played together. They called her a monster and pretended that her hand would bite people. She had no friends and often squatted in a corner watching the other children play. Soon, she refused to go back to school.

Ms. Kao's parents decided to transfer her to another kindergarten and discussed her situation with the new teacher. The teacher salved her feelings and explained her burns to the other students. She also encouraged them to play with her. In addition, when Ms. Kao performed well, the teacher would pat her head and praise her. With the teacher's attention and encouragement, Ms. Kao gradually acquired her self-esteem and overcame her fear of being close to people.

In her grade-school years, Ms. Kao had another memorable teacher, who had a close relationship with his students, treating them like good friends. He was so humorous that his classroom was often filled with laughter and joy. His teaching style had an impact on Ms. Kao. She later tried to establish in her own classroom an atmosphere where students could feel as comfortable and relaxed as he did in his classroom.

After graduating from high school, Ms. Kao studied in an industrial management college in Taipei and then worked for an electric-equipment company. Her life in Taipei was hectic and exhausting. Her father learned of her situation during a visit and persuaded her to go back to Taitung to find another job.

It was almost natural for Ms. Kao to decide to become a teacher. She was from a long line of educators: her father was a principal and her brothers and a brother-in-law were teachers. With her family's support, Ms. Kao enrolled in the Taitung Teachers College and duly received a Bachelor of Elementary Education degree.

Ms. Kao struggled with her first year of teaching. Fortunately, other more-experienced teachers helped her. They shared their own experiences and allowed her to observe their classes, which she found beneficial. The sharing and observations helped her learn how to manage a classroom and to discipline students effectively.

One year later, Ms. Kao accepted an offer from the Deer Elementary School, an Indigenous school with a resource class for learning-impaired children. While serving as a regular classroom teacher, Ms. Kao spent her extra hours helping the handicapped children. Her compassion for disadvantaged children stemmed from her own physical and mental suffering as a child. The more involved she became with special education, the more compelled she felt to help them. Ultimately, she decided to return to teachers college for the Special Education master's degree program. Two years later she received her degree and became a special-education teacher.

Ms. Kao was assigned to a resource classroom at the Land Elementary School. Her learning-disabled children were mostly Indigenous students, and many came from low socio-economic families. She worked with small groups and individuals.



She also cooperated with doctors, therapists, and social workers to diagnose children's learning problems and gave them appropriate care. Her effort was noticeable. She received an award as the year's best special educator from the Department of Education in Taitung. Many professors and interns made observations in her classroom. She was also invited to become a lecturer at the Taitung Teachers College, where she also taught the introductory class in special education.

Ms. Kao described herself as a teacher who did not like to be limited to one specialty; instead, she wanted to develop in multiple areas. She availed herself of continual learning and challenges. She said,

I do not want my teaching career to be a straight road, where everything seems predictable. I would like for it to be a rolling rock. I am always changing so I can increase my potential to do something.

Ms. Kao had accepted the principal's invitation to be the director of the Office of Teaching Affairs. She was responsible for dealing with the schoolwide teaching affairs.

One year later she resigned her directorship because she wanted to stay in the classroom, working directly with students. She said,

Even though a directorship was a high position, I couldn't do something I did not like. I wanted to be somewhere where I felt I could make a real difference. I felt that teaching was the job to which I wanted to devote my time and which I enjoy doing.

Ms. Kao took a fifth-grade teaching position and was elected by her colleagues as the fifth-grade chair. In addition to her own classroom teaching, she took charge of communications among the fifth-grade teachers, as well as the school administrator on matters of teaching and school affairs.

At the time of this study, Ms. Kao had been teaching for sixteen years as a resource teacher, a director, a classroom teacher, and a chair in the elementary school, as well as a lecturer in the college. She had been a faculty member at her current school, Land Elementary School, for eleven years. Reflecting on her years of teaching, Ms. Kao believed that she got back from the students more than she gave to them and took pride in seeing them succeed.

My students are my significant persons. I learn about them and from them every day. Their failures make me wonder why something doesn't work, and what I need to do to make it better. I think constantly and try different ways to approach them. The feedback motivates my further renewal. Their success gives me a great sense of accomplishment as a teacher—as if they were my own. Many of my students come back to see me. They tell me how they appreciated being my students. That is my greatest reward.

### *The School Context*

Land Elementary School was a typical urban school, located in the downtown area of Taitung City and surrounded with heavy traffic and crowded housings. A small garden planted with colorful flowers was right outside the front door. A U-shaped, four-story building enclosed the garden and housed the faculty offices and classrooms of the lower grades. Down the middle of the building was a lobby, along which was displayed students' work, lists of honor students, and school information. The lobby led to an athlete field, where, during recess, many students crowded to play dodge ball. Behind the field was a three-story building. It contained the classrooms for the higher grades and special classrooms, such as those used for computer classes, scientific laboratories, and music classes.

Land Elementary School consisted of the first-to-sixth grades and one resource class. For each grade there were five-to-eight classes, and each class had an average

of thirty-five students. During the 2004-2005 school year, the total enrollment was 1,230—mostly Han Chinese, but including 110 Indigenous students. Many of the students' families lived at or above the average social-economic level. Some parents worked as volunteers to help with school events, but few of them were involved with school affairs or teaching activities.

The school had sixty-one faculty and support staff, consisting of the principal, six directors, thirteen administrative staff, one nurse, and forty certified teachers, all of whom were Han Chinese, except for two who were Indigenous. Teachers did not need to perform administrative duties. The school administrators freed them for professional pursuits, without interfering with their teaching.

Grade-level collaboration was the defining characteristic of the Land Elementary School. For example, for the fifth grade, Ms. Kao and six teachers met before each semester to design their integrated curriculum and instruction. Then, they presented their instruction plan to faculty and parents at the school conference. During the semester, they continued to meet to revise their plan for meeting students' needs. Ms. Kao said that collaboration brought teachers from various backgrounds together to work as a team. Drawing on their collective wisdom made their plan more comprehensive.

Although grade-level collaboration had its benefits, finding time to set aside for teachers' meetings was a challenge. To avoid interrupting the mandatory curriculum and instruction, teachers could only meet during recess and after school. Prolonged time together, complained the teachers, sacrificed their recesses and evenings. Rather

than giving enormous amounts of personal time, teachers fell into designing easier, less time-consuming plans.

Moreover, Ms. Kao felt that her teaching was too closely linked to that of her teammates. When she wanted to try things that the team did not accept, she felt constrained. For example, she had designed a cabinet for her students' shoes. The principal favored her idea and suggested that the other teachers adopt it.

Unfortunately, a small group of teachers was not willing to accept the idea and complained that it would increase their workload. Ms. Kao explained,

I just can't stand that. I want to go out of my way to meet my students' needs. However, it looks like I am not cooperating with the team. I have to be very considerate of their feelings when moving off on my own. But sometimes I just tune them out because it is not worth the trouble.

Land Elementary School was known for its music education. The school had an orchestra for its musically talented students to learn various musical instruments. Another school focus was computer technology. Besides the school's computer laboratory, each classroom had a computer for use by the teachers and the students. At music and technology competitions in Taitung, Land students demonstrated topnotch achievements.

It was not clear from my observations whether there was a common vision about multicultural education at Land Elementary School. Ms. Kao said Indigenous students were a minority in the school population, so it was difficult to ask the school to do something special for them. As a former director, Ms. Kao once had suggested a class for students to learn their mother languages. Only a few Indigenous students chose to enroll; instead, they elected to learn Taiwanese. Moreover, Ms. Kao pointed

out, some Indigenous parents believed that Taiwanese would be more useful in their children's futures. Their arguments against learning their native languages caused the failure of the Indigenous language program. Ms. Kao could not help expressing astonishment: "If Indigenous people do not learn to use their languages fluently and commonly, they risk losing both their language and their cultural roots."

### *The Classroom Context*

Ms. Kao taught the fifth grade, with a class of thirty-three students. Four were Indigenous students—three males (Yo, Kai, and Cheng) from the Bunun tribe; and one female (Ting) from the Amis tribe. Yo was born in the city. He came from a high socio-economic family in which both parents were doctors. His academic performance was above the grade level. Kai was born and raised in an Indigenous tribe. His family's socio-economic level was average; his father was a policeman and his mother was a kindergarten teacher. His performance was average for his grade level. Cheng and Ting were the lowest achievers in the class. Both lived in Indigenous neighborhoods. Cheng's mother was a master masseuse. Ting came from a poor family; her father was unemployed and her mother worked in a restaurant.

Ms. Kao's classroom instruction for each day began at 8:30 a.m. and continued until 4:00 p.m. She taught Chinese, mathematics, art and humanities, and the flexible curriculum<sup>8</sup>. With the parents' approval, she stayed after school until 5:00 p.m. to work with the lower achievers.

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<sup>8</sup>The flexible curriculum, which took 20% of classroom sessions, was designed for the flexible use of schools and teachers. For example, schools could use the time to develop school-based activities that met the needs of the school. Teachers could use it to prepare curricula and teaching materials or tend to the needs of students, such as individual instruction and remediation (Taiwan Ministry of Education, 2006b).

At the time of this study, Ms. Kao supervised one student teacher from the teachers' college. This intern worked as a full-time position in the classroom. Usually, Ms. Kao had projects for the intern, such as correcting students' assignments and assessments. The intern also helped design the curriculum and taught some of the classes.

Ms. Kao's classroom was on the second floor of the second school building behind the athlete field. There was a shoe cabinet in the hallway outside the classroom. Because of the limited space for students to play in the school, Ms. Kao hired a carpenter to make the short cabinet. Before entering the classroom everyone replaced their shoes with slippers. With their shoes off, Ms. Kao said, "my students can do what they feel like during breaks. They can lie down and play on the floor. I want them to feel relaxed and comfortable in their classroom."

Ms. Kao's classroom was bright, with plenty of natural light from a long wall of windows. A blackboard stretched across the front of the room. Two television sets hung from the ceiling at each end of the blackboard. Three desks were close to the right-side wall. The first belonged to the intern and was piled with students' assignments and instructional guides. The second desk belonged to Ms. Kao. It held textbooks and students' workbooks. A computer and a printer sat on the third desk. During breaks, students gathered at the computer to search for information on the internet.

The students sat in six groupings in the center of the room. Each group had five or six students. They had decided to cast lots for their groupings. No matter with whom they sat, they made no complaints because they were the results of their own

selected system. In addition, Ms. Kao allowed students to vote for their group and class leaders. She facilitated their election process without intervention. Her purpose was to provide students with opportunities to participate in classroom affairs and to learn to respect each other's rights.

On the back wall was a bulletin board that displayed the students' work, English- vocabulary teaching aids, newspaper information, and Chinese proverbs. Below the bulletin board was a wooden cabinet filled with books. On top of the cabinet was a line of novels and storybooks. Ms. Kao purchased the books to cultivate students' reading habits. During breaks, students lined up to check out their favorite books that they could read at school and at home.

### *Summary*

This section covered Ms. Kao's personal history and educational background, as well as her teaching environment. Having experienced mental and physical suffering, Ms. Kao had a passion for teaching disadvantaged children. She learned to teach from the experienced teachers and proceeded to pursue an advanced degree. In addition, she pushed herself to accept various challenges, such as becoming a special education teacher, a classroom teacher, a mentor, a director, a grade-level chair, and a college lecturer. She believed that teaching and learning was a mutual process. Students' failures stimulated her thinking and improved her teaching. Their success, in turn, confirmed her ability as an effective teacher.

This section also defined Ms. Kao's school context, consisting of the school environment, demographic data, the school culture, and school policies. Land Elementary School had a culture of grade-level teacher collaboration; however, it was

constrained because very little time was provided for meetings. Neither did it promote the flexibility to innovate. Generally, school policy gave priority to education in music and computer technology. There was no policy specifically for teaching of Indigenous languages because of the school's small minority population and the lack of support from Indigenous parents.

The description of Ms. Kao's classroom setting involved student data, the teacher's schedule, and the classroom arrangement. Ms. Kao established a democratic classroom by giving students the authority to make the class rules. She showed them respect, giving them the right to make the decisions. Her classroom design reflected her concern for students' needs. She allowed them to play on the classroom floor because there was not adequate space elsewhere in the school. To develop their technological skills and reading ability, she encouraged their use of the classroom's computer and provided them with abundant reading materials.

#### The Education of Indigenous Students

From studying Ms. Kao's beliefs, knowledge, and practices as an educator of Indigenous students, four principles emerged: accept students' uniqueness, nurture each student's value, vigilantly attend to cultural bias, and cope with children's cultural conflicts.

##### *Accept Students' Uniqueness*

When asked if there were general characteristics that her Indigenous students brought to the classroom, Ms. Kao responded, "It might be their learning style." She cited Kai as an example. "He is very animated and cannot sit still in the chair. He



moves perpetually during class. He is also very talkative and often yells out his answers.”

Ms. Kao believed that many teachers, herself once included, were unaware of Indigenous students’ active learning style, which was often perceived as misconduct. Typically, their teachers demanded that Indigenous students follow the rules and punished them if they did not.

Kai’s previous teachers complained about his learning problems. When he arrived in my classroom, I also demanded that he sit still in his chair and told him to keep quiet. When he did not comply with my instructions, I got upset and punished him.

Ms. Kao’s training in special education and her teaching experiences led her to change her thinking and teaching methods for Indigenous students. She analyzed the factors that influenced their learning and studied their learning style.

I think that my expertise in special education and my teaching experience changed me a lot. I learned to look at situations flexibly. I tried to learn why students acted as they did and to determine what factors impacted their learning. For example, I learned that Kai comes from a tribe where his lifestyle is typical. He behaves the same way in school. His clothing is often dirty and his hair is always wet because he loves to play outside. When teachers expect him to sit quietly in his chair and to be orderly, he feels constrained and becomes unruly and resentful about school and teachers.

While some teachers expect students to change and to meet their expectations, Ms. Kao believed that teachers sometimes need to understand and respect their students and to adjust to them. Acceptance of students’ uniqueness should be the first step.

I try to understand them and give them latitude. I find that their energetic and talkative life style does not mean that they are not learning. They pay attention and give constant feedback. This is their learning style. I accept and respect

their difference. I want them to be themselves; I do not demand that they act like others.

Ms. Kao tried to understand her students' needs and to consider those needs when formulating and expressing her classroom expectations. My observations confirmed that she did, indeed, give such consideration. For example, when the students began to get restless, she allowed them to stretch their legs and to sit in their own comfortable way to help them stay focused on their work. She also respected the way Indigenous students liked to interact. They liked to make jokes, so she joked freely with them, sometimes using a feigned accent. Students seemed to like her style. They often gathered around her and considered her their best friend.

Ms. Kao valued having Indigenous students in her classroom. She believed that their character enriched both the teaching process and the learning experience. She gave examples:

Yo is very smart. He often comes up with creative ideas and asks me questions until he receives satisfactory answers. He challenges my thinking, as well as that of his classmates. Kai is particularly humorous. He makes frequent jokes and often makes the class cheerful. Also, my Indigenous students are very passionate. They express their feelings freely. Frequently, they say loudly, "I love you, Ms. Kao" in public and in private—something I rarely hear from the Han Chinese students. I appreciate having Indigenous students in my classroom. How boring my class would be if I didn't have them!

### *Nurture Each Student's Value*

Ms. Kao pointed out that academic achievement was highly valued in Land Elementary School. Students who best performed received honors from the school, as well as admiration from their classmates. Conversely, those with a long history of low achievement did not have much status in the classroom. Predictably, the low-

achieving students lacked self-esteem and self-assurance. Discovering and nurturing those students' core values was one of Ms. Kao's highest priorities.

I give a lot of positive reinforcement because you cannot teach them anything until they value themselves. I want them to know that even if they don't have a good academic record, they are not inferior people. They are good at something else.

To emphasize students' abilities, Ms. Kao observed their performance and supported their positive accomplishments with praise. For example, she noticed that Ting had skillful hands. Windows that she wiped and stairs that she swept were spotlessly clean. Ms. Kao praised her work and expressed her appreciation for Ting's contributions to the classroom. She regularly asked Ting to assist her in the classroom, reaffirming that Ting had helpful skills. For example, she would ask Ting to help distribute the assignments and books to the class. Ting immediately and happily took on the tasks. By recognizing Ting's abilities, Ms. Kao confirmed her value to the class.

Ms. Kao methodically discovered the interests and talents of her other low-achieving students, as well, and encouraged them to participate in various school activities and competitions, such as speech contests, the cheer squad, and folk dancing. She explained:

Disadvantaged students do not have the same resources as rich students. I might be the only one who can give them opportunities. I do not care if they win a prize. I hope, through the whole process, they will find their interests and develop their talents.

During our interviews, Ms. Kao frequently reaffirmed that her role as a teacher was to help students “develop their potential, find what they want, and shed their light upon society, no matter what else they do.”

Yo can study in a college and be a doctor like his parents. Kai’s parents are blue-collar workers; still, he may find a steady job, such as working for the government. As for Cheng and Ting, I think that they will get into the vocational school and learn the skills for making a living. Ting could become a hair stylist or cosmetologist. Cheng’s mother is a masseuse; he may learn his mother’s skills.

Although Ms. Kao tried to nurture all students’ values and strived to develop potential, her expectation for some children had limits. Her vision of children’s futures seemed to be based on their academic achievement and the size of their parents’ footsteps.

Not every child will go to college; not all of them can or want to. All children do not learn to the same level or have the same capabilities. If they are college material, I hope they go to college. Others will end up working as laborers. There’s nothing wrong with such jobs; as well as any other work, they make our society productive.

Ms. Kao tried to explain why all students might not appear to become equally successful. To her, true success was not measured by how much education a person achieved or how much wealth he or she ultimately accumulated, but rather by how conscientiously, diligently, and successfully each performed his or her lifetime duties. She believed that not all students were college prospects, but that there was also a place for those students in our society. Children who become laborers can be successful by giving and doing their best. She justified her different expectations for some students by assigning high value to all their duties and responsibilities.

### *Vigilantly Attend to Cultural Bias*

Because her father had been a principal in an Indigenous school, Ms. Kao found it, “very natural to be among Indigenous people.” Her own early experiences affected the way she perceived them. Usually seeing them not working but drinking, she believed they were lazy and alcoholic. Her opinion changed when she assisted her husband, who worked in the Department of Social Education, conduct a study of Indigenous adult education. During the study her increased contact with the people led to a better understanding and appreciation of Indigenous culture.

I realized that drinking wine had some special meaning for Indigenous people. A long time ago, many Indigenous people were farmers. They made wine and then gathered together to drink at festivals celebrating their harvests. Also, they valued their tribal relationships. Gathering and drinking were ways of maintaining their relationships. Although most of them no longer work as farmers, they preserve the tradition.

Her contact with Indigenous people also changed some of her conceptions about their culture and her knowledge about cultural bias. “It opened my eyes a little. I began to see that I should not make assumptions about their culture.” Recognizing her biases about Indigenous people was the first step in dealing with her problem. Learning how to avoid letting her biases affect her interaction with Indigenous students was the next step.

I try to be careful about what I say in the classroom. I avoid saying something that implies cultural bias. For example, to admonish Cheng for submitting his homework late, I would not say, “You Indigenous people always do this.” That kind of statement hurts his feelings, creates biological guilt, and promotes stereotyping among students.

Ms. Kao was also aware of students’ biases against Indigenous students and promptly corrected their prejudiced behavior. Once, when Ting was sharing a family-

life experience, she said that her family often got together to drink and barbecue all night long. Another class member showed a disgusted look and loudly spoke out, “It’s so weird of your people.” Ms. Kao corrected the student’s attitude immediately, “Don’t say such a thing to her! You hurt Ting’s feelings. It is her family’s culture. It is the way they show their affection for their relatives. It is not your way, but it is not wrong. We should respect their life style.” After hearing the teacher’s explanation, the biased student responded, “I understand. I should not have said that to Ting.”

Ms. Kao seized the moment to identify cultural bias and to provide a better understanding of another culture. She expected her students to be “multicultural acceptors,” which meant, “they are open-minded and non-judgmental about different cultures. They learn to respect each other’s positions and differences.”

Ms. Kao believed that, because of limited cultural knowledge, some teachers also had biases against Indigenous people. To teach acceptance of cultural diversity, she asserted, prejudiced teachers must also change. However, she found it difficult to organize a program designed to prepare teachers to teach Indigenous students. “It is not because Indigenous students are a minority in school; most teachers just don’t care.” For that reason, school administrators did not emphasize cultural diversity in teachers’ professional development. A visit to an Indigenous tribe or museum was all that was required—which, Ms. Kao said, “did not help much to make teachers aware of their personal biases or to provide a deep understanding of Indigenous cultures.”

Ms. Kao believed that teacher educators should design programs to prepare teachers for dealing with cultural diversity. Her own experiences with Indigenous people led her to believe that awareness and understanding are prerequisites for

change. She identified self-awareness and education about other cultures as requirements for all teacher-preparation programs. She believed teachers needed to understand their feelings about different learning styles and about cultural interaction. That would help them address students' needs appropriately. Another way, she suggested, was to provide teachers with opportunities for cultural immersion, such as living with a tribe. She believed, "It could help teachers experience a culture different from their own and give them the opportunity to clarify their misunderstandings about the culture."

### *Cope with Children's Cultural Conflicts*

Ms. Kao realized that in her culturally diverse classroom, cultural clashes among students were a serious behavior problem. She cited an incident in which a few Han Chinese students had revealed their cultural prejudice against Indigenous students.

At the beginning of the first semester I found that some Han Chinese students disliked standing with the Indigenous students during school assemblies. They rarely conversed with them. A few weeks later a serious fight occurred. A Han Chinese student criticized Ting, saying she was stupid because she was Indigenous. His prejudiced language and attitude ignited other Indigenous students' wrath. Yo gathered with Kai and Cheng and fought with the Han Chinese student, shouting, "We are Indigenous people. So what? Why are you insulting us?"

The conflict demonstrated clearly to Ms. Kao that there was cultural discrimination in her classroom. The incident made her recall that, as a child, she had been teased and discriminated against by her classmates because of her burn scar. Worse, perhaps, her teacher had done nothing to protect her or teach the other children to accept her. The mental anguish had been greater than the physical pain

caused by her injury. Consequently, as a teacher, she was committed to guiding her students to respect and care about others.

It's my instinct to protect disadvantaged children. I understand their feeling. Having personally experienced rejection, I want to ensure that I do everything I can for those children, because I don't want them to have the problems I had.

To help her students understand the pain of discrimination, Ms. Kao told them about her childhood misfortune. She showed them her arm and hands and shared her suffering. She also used other examples, "If you preferred to write with your left hand, others might call you a freak just because you were different from them. How would you feel?" The students said they would feel angry and sad. Ms. Kao's purpose for giving examples was to let students imagine themselves in another person's position, trying to understand what someone else may be going through. She hoped that learning to be empathetic would teach her students to treat people with respect, just as they wanted to be treated.

Ms. Kao believed that her Indigenous students had been emotionally scarred by the boys' fight. She believed that her personal story bonded her with her Indigenous students, as they then knew that she, too, had experienced the pain of discrimination. She validated their feelings by telling them that she understood what it was like. She dealt with the fighting boys by punishing them publicly. "I have to demonstrate to the entire class that fighting is not allowed in school. Whoever violates that rule has to pay the consequences." Ms. Kao had a private talk with her Indigenous students after the public punishment. She told them,

You and I may come from different races, but that should not lead us to oppose one another. Some people might misunderstand your people. You have to let



them know the wonders of your culture. Let them respect and appreciate your culture. Fighting is never a way to eliminate others' prejudice.

The purpose of Ms. Kao's talk was to calm the Indigenous students and to reinforce proper values. She explained that her Indigenous students looked for validation of their culture, so they behaved in ways they thought best to protect their cultural identity. To guide their behavior, Ms. Kao believed that she had to express her acceptance of their culture and her respect for them as a people to make them willing to accept her suggestions, opening themselves to her teaching.

Ms. Kao said that Yo had particularly changed after the fight. Not only had he maintained his high achievement, but he also demanded that Cheng finish his own work—during breaks, if necessary. Sometimes he would volunteer his assistance. He often proclaimed loudly, “We are the Bunun tribe. We are an excellent tribe. We don't let others look down upon us.” He wanted to prove that Indigenous people were not stupid, so as to protect their cultural identity.

### *Summary*

This section covered Ms. Kao's beliefs, knowledge, and practices for the education of Indigenous students. It also identified underlying causes and influences, as well as objectives and results.

Ms. Kao's expertise in special education, coupled with years of teaching experience, prepared her to recognize, accept, and respect Indigenous students' unique learning style. They were active, vocal, and creative while learning. She accepted their learning style and gave them the freedom to express themselves according to their own needs. She also appreciated the elements that made them

unique and which, she believed, also enriched the learning experiences of the entire class.

Ms. Kao believed in the worth of the low-achieving Indigenous students. She had strategies for validating their ability: openly identifying their good performance, and reinforcing their sense of accomplishment. Keenly aware of the lack of opportunities for them to learn multiple skills, she encouraged them to participate in school activities in order to develop their potential. However, she realized that there were limitations. Her expectations for their future development were based on their academic performance and family background.

Ms. Kao believed that teachers, as well as the students, should be multicultural receptors and free of Indigenous-culture biases. She suppressed her own biases and closely monitored those of her students. She felt that many teachers were unaware of and unconcerned about either their own or their students' cultural biases. She believed that teacher-education programs should provide opportunities for teachers to experience Indigenous cultures and to reflect upon their perspectives of them in order to correct any misunderstandings and misconceptions.

Ms. Kao believed that one of the objectives of education was to develop students' sense of respect and care for other people. To mold students' behavior, she shared her own experiences with discrimination. That was one of several examples she provided to her class. She believed that her methodology helped both the Indigenous students and the Han Chinese students develop empathy for others. Despite her perseverance, cultural prejudice and clashes still occurred in her

classroom. Dealing with those problems provided her with opportunities, at dramatic moments in her students' development, to teach tolerance.

### Curriculum and Instruction

This section describes how Ms. Kao dealt with limitations of the prescribed curriculum and with students' learning difficulties. It also illustrates her teaching methods to promote learning and overcome problems. The section is divided into four parts: cultural interaction, experience sharing, teaching mathematics, and teaching how to write.

#### *Cultural Interaction*

Examining the curriculum, Ms. Kao pointed out that it was tailored to Han Chinese mainstream values. It reflected a sadly limited knowledge of Indigenous cultures. Based on only one cultural perspective, it had, in Ms. Kao's judgment, a negative influence on the students. It failed to provide Han Chinese students the opportunity to experience the realities of inter-cultural relations and to understand other cultures. Also, it deprived Indigenous students of the opportunity to understand and appreciate their own cultural heritage, and it jeopardized the survival of their cultural roots.

Although the curriculum did not provide for multicultural education, Ms. Kao believed that teachers could promote cultural diversity in their daily teaching. They could design instructional activities to promote cultural interaction and understanding. Although no such events occurred during the weeks of observation for this study, Ms. Kao described three such activities that she had designed: language interaction, parental involvement, and cultural visits and reports.

Ms. Kao described a language-interaction teaching segment called “Every Day, One Word,” that she had designed when she taught in the resource classroom a few years earlier. Students used their respective native languages to teach words—one at a time—to the class. Her purpose was to provide students with the opportunity to use their mother languages and describe cultural aspects of their lives. To teach a word correctly, they had to consult with their parents to clearly understand its meaning. When they told the class something in their mother language, Ms. Kao often encouraged them by saying, “I am glad you can understand that. You are smarter than I; I don’t know those things. That is really good; you need to hold onto that.” Her remarks encouraged the students to identify themselves with their languages. She found that they had fun and became interested in learning other languages. It made them feel close to their respective cultures, as well as that of others.

Another of her activities was designed to bring parents to the classroom to introduce their specialties. One Indigenous parent exhibited his wood collection, described the characteristics of various woods, and introduced the class to wood crafting. Another couple brought a guitar and taught the class some Indigenous songs. Afterwards, the parents participated in classroom activities. According to Ms. Kao, the parents’ involvement was educational, imparting information not found in the textbooks. Also, their involvement changed Han Chinese students’ misconceptions of Indigenous people. Ms. Kao remembered some of the students’ responses: “Indigenous people are not as alcoholic, barbarian, or poor, as we thought before. They are interesting, skillful, and enthusiastic people.” Despite its success, the program was suspended because so few parents were inclined to participate.

The third cultural interaction that Ms. Kao described was a trip to the Bunun Indigenous tribe and their museum. Being part of the unit, “Know Our Homeland,” in the school’s curriculum, the purpose of the trip was to introduce the students to Indigenous cultures. After the trip, Ms. Kao designed an activity called Cultural Reports. The students selected cultures with which they most identified or in which they were most interested. They wrote a project and presented it by using the computer program, PowerPoint. Some students traced the origin of an Indigenous culture and described their textiles, food, and agriculture. Others described cultural activities and showed photographs. Ms. Kao saw that the trip and reports increased students’ understanding of other cultures.

#### *Experience Sharing*

When asked about the factors that influenced the learning of low-achieving Indigenous students, Ms. Kao’s first response was the curriculum. She believed that the design of the curriculum was not relevant to the life experiences of Indigenous students, especially those who still had a cultural connection with their tribes and neighborhoods. Since the curriculum was not built around Indigenous living, the students could not relate to it and were bored by it.

When asked what, if any, methods she used to relate the subject matter to the students’ experiences or to make it fun and interesting for Indigenous students, Ms. Kao responded, “I cannot design lesson plans based on Indigenous cultures because they are a minority; it would not be fair to the rest of the students.” Characteristically, though, she did have a way, which she called experience sharing. It was designed to

connect curriculum to students' experience and to help students contribute to the learning process.

Ms. Kao first established an emotionally comfortable environment in which students could share their experiences. She said, "I want to make sure they know that my room is truly safe, and that they can say whatever they need to say." For the process to succeed, she realized that she had to build a trustful relationship with her students. That kind of relationship made them feel comfortable about talking to her. The way she chose to build such a relationship was to share stories about her personal life with them, making it easier, in turn, for them to share information about themselves with her.

I am very open with them and very sharing with them. I tell them about myself and my family. They know that I'm a real person because we have shared stories and experiences. They trust me and feel comfortable about asking me questions and telling me about things that have happened to them.

To get across to her class an unclear point in the curriculum, she would tell them a related story from her own experience. Then, using her story as a model, students would tell similar stories from their own lives. In that way, the lesson in the curriculum, which was basically foreign to the children, was translated into a relevant, meaningful learning experience. For example, when teaching the Chinese unit, "The Father's Treasure," she told the class that the story reminded her of a personal treasure of her own. It was a dress that her mother had made for her when she was a child. "It was a beautiful silk dress with long sleeves that my mother had made to cover the scars on my arms. I treasured it so much because it symbolized my mother's love for me."

After sharing her story, Ms. Kao asked the class if they had treasures. Several students shared their stories. Yo said that he treasured his grandfather's tribal house. "The house was built beside the woods. Horns and bows, which were my grandfather's hunting tools, were hung on the wall." While Yo was speaking, Ms. Kao nodded approvingly and maintained eye contact with him. Most of the students also looked at Yo and listened to his story quietly. Once, a student interrupted, wanting to share his own treasure. Ms. Kao asked him to show respect to Yo. Eventually, she said to Yo, "I am curious about the house. Could you tell us a little more?" Yo continued, "The house was destroyed by an earthquake a few years ago. However, my uncle rebuilt it and channeled spring water from the mountain to the yard. He also made a beautiful lawn and built a wooden bridge in front of the house." Ms. Kao smiled and responded, "It must be a pretty house." Some students said they would like to see the house. Yo promised that he would bring pictures to class.

During the observed episode described above, Ms. Kao modeled behavior that she wanted the class to emulate. She paid close attention to the details in the stories. She made eye contact with the story tellers and nodded in an encouraging way, smiling, showing interest, and encouraging them. She found small ways to convey a sense of appreciation for the students' knowledge and story-telling skills.

Ms. Kao communicated her respect by listening to and valuing the children's perspectives. "I don't express doubt about anything they say. I am a learner, too. I respect and appreciate their life experiences. What they say is valuable." She corrected anyone who interrupted a speaker. She said, "I get everyone to listen to and

respect pieces of others' life experiences. I want them to know that they can learn from one another.”

Ms. Kao had a remarkable ability to translate an otherwise boring and irrelevant curriculum into meaningful language and real-life experiences for her class. Also, she was able to lead them to actively participate in the process. At the same time, she led them to involve aspects of their Indigenous lives and cultural backgrounds, thereby promoting personal and cultural pride, as well as the objectives of the curriculum.

### *Teaching Mathematics*

The mathematic curriculum was not difficult for most of Ms. Kao's students. “It is very basic and simple. Even students in the resource classroom can follow it. Therefore, I can augment the curriculum.” She often finished one unit in two classes and used the rest of the week's classes to teach supplementary material, called “Graphic Mathematics,” which was privately designed for practicing more complex problems.

When asked about the learning difficulties of her low-achieving Indigenous students, Ms. Kao responded, “They are generally weak in problem solving. They cannot seem to understand narrative problems.” She believed that their attitude was the major reason for their difficulty.

They often look absent-minded when solving mathematics problems. They tell me that they don't know what to do. However, if I sit with them and read the problem to them, they can sometimes answer the question. It's not that they have a reading problem; rather I believe that they concentrate better when I am with them. I believe they are competent to do it; they just don't have motivation to learn, so they lose focus easily.



To keep her Indigenous students attentive, Ms. Kao called on them as soon as she saw signs of fatigue or distraction. For example, when teaching the mathematics unit, “The Unknown Number,” she asked the class to read the problem in the textbook. Then, she called on Cheng to say what the problem asked. Cheng did not answer. Ms. Kao sternly asked, “Where is your mind? You did not pay attention. I saw you looking around. Focus on the class.”

Generally Ms. Kao played a leading role in guiding students’ problem solving. After a concept was explained and understood, she solved the sample problems. Problem solving followed a fixed procedure that all the students knew. She would call on students to work on the problems in the books and guided their procedure. She frequently asked them if they understood what was being explained. She also posed similar problems and called on different students to solve them. She explained her method:

I have a preliminary objective for each unit, but I do not have a fixed lesson plan. What I do depends on my students’ progress. I watch their facial expressions and frequently verify their comprehension. For example, I expect all students to solve the simple problems, so I call on the low-achievers to verify their understanding. If they cannot get it, I will repeat teaching the concept until they understand.

After Ms. Kao demonstrated how to do something new, the class worked independently on the problems at the bottom of the page in their text. As students finished, they raised their hands and waited for Ms. Kao to check their work. If everything was correct, they were given a break. Often, two low-achieving Indigenous students, Cheng and Ting, could not complete the assignments. Sometimes Ms. Kao asked the high achievers to help. However, she said, “the high

achievers do not have the necessary patience.” Ms. Kao would work with Cheng and Ting, explaining how to solve the problems; however, most of the time, they missed their recess. Ms. Kao explained, “I feel so sorry for them when they are deprived of their favorite time, but I have no choice. They fall behind, so I have to keep them in to get their work done.”

### *Teaching How to Write*

Ms. Kao pointed out that most of her students had no problem writing basic Chinese words, so she had allowed them to advance to self-learning. Students were expected to find the meaning of assigned words in the dictionary and on the Internet. Then, they used PowerPoint to introduce each word to the class, including its structure, definitions, related words, its use in sample sentences, and related pictures, if any. Using computer technology, Ms. Kao believed, kept the students more interested in learning the words than the traditional method.

When asked her perspective on the learning difficulties of low-achieving Indigenous students, Ms. Kao stated that they had problems making longer sentences. The major reason, she believed, was related to their learning attitude. “They are just too lazy to make longer sentences. They want more time to play, so they often do sloppy work or leave it undone in their workbooks.” Then, she added an afterthought:

Word order in Chinese is different. That highlights another characteristic that students have. Sometimes when they create sentences they invert words. It is difficult for them to make a correct sentence, possibly because their native language interferes. Indigenous students who speak Mandarin fluently do not have that problem.

To help Indigenous students write longer, more correct sentences, Ms. Kao followed the practice of the “expanding” sentences. For example, when teaching the

word, “careful,” she asked Ting to use the word in a sentence. Ting said, “He was very careful.” Ms. Kao asked her to expand the sentence. Ting thought a few seconds and answered, “He did everything carefully.” Ms. Kao praised her and asked if anyone could make the sentence longer. Kai raised his hand and said, “He did everything carefully, so everyone trusted him.” Ms. Kao praised Kai’s good sentence. After some similar exercises, she told the class to write the expanded sentences in their workbooks.

Writing compositions was strongly emphasized by Ms. Kao because she believed it was a skill requiring a teacher’s assistance and guidance. Particularly, she perceived that the low-achieving students lacked organizational skill. “They don’t know how to begin, so I give them the structure.” She taught them to apply reading rules to their writing. For example, when teaching reading, she would introduce structure first. Then, she would tell the class to identify the key point in each paragraph, and she would show how they related to each other. She would conclude by reviewing what made a paragraph and a composition.

After each reading lesson, Ms. Kao would immediately conduct a writing lesson. A typical writing lesson involved her explaining the lesson, giving examples, leading them to talk about what they might write, having them write, and providing feedback and evaluation. According to Ms. Kao, the topic of the assignment was often similar to what they had just read, so the students had a structure to follow. She also encouraged them to share their own experiences both orally and in their writing assignments. She believed that beginning with personal pieces and familiar subjects made writing more relevant to them. Moreover, when providing feedback and grading

their writing assignments, she was flexible, not holding them all to the same standard, which some of them could not attain. She explained,

Some students can write an excellent four-paragraph composition. That doesn't mean that others can do it. Every child is different. Cheng could not write a full essay, but I expect him to write at least three hundred words. I am flexible. For different students I set different standards. I make adjustments based on my assessment of their ability.

### *Summary*

This section illustrated Ms. Kao's knowledge of and beliefs about curricula and her students' learning problems, as well as her teaching methods for improving their learning ability.

Ms. Kao believed that the curriculum lacked multicultural perspectives, which could be compensated for by teachers' creative lesson plans. Her instructional activities to promote multicultural understanding included: providing time for students to teach and learn languages from different cultures, involving parents from different backgrounds to the classroom to discuss their specialties, visiting Indigenous cultures, and having students prepare and present reports on various aspects of other cultures' lives and experiences.

Ms. Kao realized that curriculum was unrelated to Indigenous life and did not, therefore, motivate them to learn. To engage their learning, she sought to make the learning experience more relevant to their living experiences. She created a welcoming environment for them to share their experiences by modeling, encouraging, and respecting and valuing every individual.

Ms. Kao perceived that her low achieving Indigenous students had trouble solving mathematics problems because of their lack of motivation. She asked them

questions to capture their attention and gauge how much they understood. She deviated from her lesson plans to attend to students' needs, as she perceived them. Her low-achieving Indigenous students had to skip recess to get their work done.

Her low-achieving Indigenous students also had difficulties writing sentences and compositions. She believed that their difficulties were related to their laziness, to the conflict of their mother language with Mandarin, and a lack of organization skills. To deal with those problems she devised a technique for expanding sentences, employing reading-structure methods, making writing relevant to the students' life experiences, and accommodating to their ability in her feedback and grading.

#### Indigenous Family Relations

Some of Ms. Kao's teaching style reflected her knowledge of and beliefs about Indigenous family relations. Two illustrations of that influence were found in her techniques for building partnerships with parents and for providing special care for needy Indigenous students.

##### *Build Partnerships with Parents*

Ms. Kao believed that parent involvement was the key to student success, and it could greatly reduce the amount of teaching time required of teachers. Therefore, she tried to build partnerships with parents in order to involve them in their children's education. Communication with parents was her way to get them involved. For example, she wrote a letter to parents at the beginning of each semester. In the letter, she listed the ways in which she expected them to cooperate, such as reviewing homework, praising good work, and developing childhood habits of responsibility.

She also telephoned parents and reported on their children's performance at school.

She explained her purpose:

I try to make them feel like partners, like a part of their children's work. I give them some suggestions—concrete things they can do to help their children. I try to contact them by telephone and my periodic reports to keep them informed about their children's performance. I hope they will praise their children for good performance. They should take some responsibility if their children have problems.

Although Ms. Kao tried to involve parents in their children's education, she was not pleased with the level of involvement of Indigenous parents. For example, Yo's parents were doctors and had high socio-economic status. They valued the education of their child and demanded the best for him. However, they often questioned what and why Ms. Kao did certain things in the classroom. They were certainly involved, but Ms. Kao seemed frustrated because she felt that her expertise was sometimes questioned.

By contrast, Ms. Kao found that communication was easy with the parents of her low-achieving, low socio-economic status Indigenous students. They were not bothersome and did not question her teaching practices. However, their trust did not cause them to become more involved in the education of their children. They did not come to school, and they expected the teacher to take care of their children.

Ms. Kao had explanations for the lack of involvement of parents of her low-achieving, low socio-economic status Indigenous children. She believed, "either the parents are too busy at work or they just do not care. They have so little time to spend with their children." Some of them, she added, "do care about their children's

progress, but they are incapable of helping them with their studies.” She gave some examples:

Ting’s mother often tells me, “I try to get her to do her homework but I just can’t control her.” Cheng’s mother is uneducated. She often says, “When I look at his homework, I don’t understand it.” She is being very honest and really tries to help. She just does not have the necessary knowledge and skills.

Another explanation for Indigenous parents’ unsupportive educational attitude, Ms. Kao believed, related to their cultural background. She implied that Indigenous parents were less inclined to work harder to improve their lifestyles and were satisfied with living in their tribes. “They are content with where they live. Fishing and farming for living are okay for them. They don’t care if their children don’t obtain a higher education.” Some Indigenous parents, as she knew, had a cultural identity and mission. “They hope their children learn their culture and make contributions to the tribe. They do not have high expectations for their children to enjoy high achievements in mainstream society.”

As the parents’ partner, Ms. Kao said that she respected parents’ educational opinions and modified her teaching objectives to reflect their expectations. She explained, “If parents have high expectations for their children and if their children are highly motivated to learn, I will adopt the parents’ goals and expect high achievement from their children.” However, when parents had low expectations and their children had low-level motivation, Ms. Kao said she would do her best to help them learn. She would not require them to attain a level beyond their ability, because she believed it would simply cause more stress for the parents and more frustration for the children. She expected students to perform at their grade level, and she

provided them with the appropriate life skills. “Since they come out of the tribe to the city, I encourage them to learn. One day, when they return to their tribes, they can apply what they learned and improve life in the tribe.”

### *Provide Student Care*

Experienced as a special-education teacher, Ms. Kao perceived Indigenous students as emotionally handicapped, stemming from their family backgrounds typically characterized by unsupportive parents, unstable family conditions, and a cultural background that differed from the mainstream in which they lived. However, she pointed out that many teachers perceived them as learning disabled and often referred them promptly to the resource classroom. They rarely considered the family factors that might challenge Indigenous students to do better academically.

Ms. Kao believed that teachers needed to be respectful, caring, and empathetic with Indigenous students. Understanding their backgrounds was the first step. One example she cited was an Indigenous student, Do, whom she had previously taught. Because he usually submitted his homework late, she accused him of being lazy. She expected him to follow the rules. However, a home visit made her realize how difficult that would be.

I was shocked when I saw that his mother was paralyzed. His father had to work hard to support the family’s ten children. Do, as the oldest child, had to dig bamboo shoots and sell them on the streets after school to help his father with the family burden.

Ms. Kao was profoundly affected. She became more aware of her biases. “I was ashamed that I had so subjectively decided that he was lazy. I felt so sorry about the way I had treated him.” She came to believe that teaching should not be fixed,



one-style-fits-all process; but rather, that it should be flexible and changeable, depending on children's needs, as determined by the teacher's study of their backgrounds.

We can't just demand that students follow the rules and punish them if they don't. We need to understand their problems in and out of school. Although we cannot change children's home environments, we can change our treatment of them by being more flexible and accepting.

In her current classroom, Ms. Kao's teaching style reflected her understanding of the students' family backgrounds. She said that some of her students received parental guidance and had a good learning-rich environment, but that some did not; and her low-achieving Indigenous students least of all. She tried to provide it for them.

They need extra support and help. I work hard to provide it for them. I work in the morning with them. I keep them during break. I sometimes keep them in during physical education. My work day typically extends to 5:00 p.m. to keep them longer. I keep as many as possible because their after-school learning is zero.

Ms. Kao understood that being academically undernourished at home limited her Indigenous students' motivation to pursue high achievement. She encouraged them by saying, "I spend so much time with you because I care about you. I don't want your family life style make you lag behind. I want to see you make progress." She believed that her assurances gave them security and encouraged them to perform better. "They know that I will never give up on them. They are motivated to learn because they do not want to disappoint me."

Keeping the students after school so much was exhausting. In our interviews Ms. Kao sometimes expressed her frustration about parents' apathy and its damage to the children.

They are already so far behind. They need their parents' help to make sure they do their homework. If they helped, that would save teachers' time. However, parents do not back us up. We must do it all, and sometimes it's exhausting.

Ms. Kao maintained that relying solely on teachers' efforts to provide academic care for Indigenous students was not enough. She believed that the long-term solution lay with community assistance to provide parent education and after-school child care.

It is not just the school's responsibility. The community needs to be more involved. It should take the leading role in organizing some programs to educate the parents and to provide after-school care, such as study groups and parenting-skills training. The school should be the community's partner, providing resources for community programs.

Ms. Kao believed that the church, rather than school, should be the hub of a community. She knew that pastors were significant persons for the Indigenous people. Church was a place where students and parents could feel comfortable. She envisioned the church as the place where after-school classes for both parents and students could best be offered. Only community support could make that happen.

### *Summary*

This section outlined Ms. Kao's knowledge of and beliefs about Indigenous families. She believed that it was crucial for educators to build partnerships with parents in order to involve them in their children's education. She communicated with parents by letter and telephone and through reports on students' performance. She observed that the parents of high-achieving, high socio-economic status Indigenous students had more involvement, but she disliked their questioning her expertise. The parents of low-achieving, low socio-economic status Indigenous students trusted the teachers but did not help children enough, possibly lacking time, motivation, skills, or

the realization they needed to help their children with the schoolwork. Ms. Kao respected parents' educational goals for their children and adjusted her expectations to match those of the parents.

Perceiving her low-achieving Indigenous students as needing special attention because of their families' backgrounds, Ms. Kao gave them particular care and help. Her caring showed in her trying to treat them according to her understanding of their family backgrounds. Because they lacked academic support at home, she gave them extra help, using time normally spent on breaks and naps, as well as time after school. She assured them that she would never give up on them, and she pushed them to progress. However, spending so much time and energy on them made her feel burned out. She suggested after-school parenting and care programs in the community to relieve teachers of some of the workload.

### Conclusion

Ms. Kao's pedagogical practices reflected her accommodation to students' needs and were guided by her knowledge of and her beliefs about herself, the educational process, and Indigenous students and their families.

Ms. Kao believed that teaching was not a straight line but a rolling rock. She kept learning and took various professional positions to challenge herself. She perceived that her students were her significant persons for her instructional improvement. Their feedback—both the successes and failures—was how she assessed her teaching effectiveness.

Ms. Kao recognized that Indigenous students were capable but disadvantaged in learning. Their disadvantages were caused mainly by three factors: the curriculum

design, their learning attitudes, and family backgrounds. First, she perceived that the curriculum design lacked multicultural perspectives and failed to connect with Indigenous students' life experiences. She believed that teachers should provide cultural interaction for students to understand various cultures. Strategies she used to promote mutual understanding included: learning each other's mother languages, inviting parents to describe to the class their professional specializations, arranging a trip to Indigenous tribe, and having students write and present cultural reports. Her style also included her efforts to establish a democratic learning environment where diverse experiences and opinions were shared and valued.

Second, Ms. Kao observed that, because of their low motivation to learn, Indigenous students had difficulty solving mathematics problems. To increase their understanding, she elaborated on and clarified problem definitions. She also asked questions to verify students' comprehension and concentration. In addition, she believed that Indigenous students had difficulty writing long sentences and compositions. Their difficulty, Ms. Kao believed, was caused by their laziness, misunderstanding Mandarin, and a lack of organization skills. She improved their writing by expanding sentences, relating writing to reading, making writing relevant to their experiences, and considering their writing ability when providing feedback and assigning grades.

Third, Ms. Kao perceived low-achieving Indigenous students as having special needs because of their low socio-economic status and their inactive, unsupportive family backgrounds. Building partnerships with parents to involve them in the education of their children was a high priority. She contacted parents by mail and

telephone and by reporting their children's performance. Through interaction with parents, she was aware that there were different expectations among them. She built her own expectations for her students to reflect their parents' goals. In addition, recognizing her students' lack of academic nurturing at home, she used extra-curriculum time to improve their learning, and her encouragement was aimed at securing their success.

Ms. Kao was aware of cultural bias and clashes among her students. She believed that an important objective of teaching was to help students accept a multicultural society, respecting and caring for all peoples, regardless of their cultural origins. She taught them about similarities and differences among peoples. By applying what she taught them, she believed, students learned to cut through some of their stereotypes about other people. Sharing her personal experiences with students and giving them examples, Ms. Kao hoped they could understand the pain of being discriminated against and develop empathy for others.

Ms. Kao's personal and educational experiences shaped her beliefs about and strategies for teaching Indigenous children. Having been a handicapped child who suffered discriminatory experiences, Ms. Kao had a strong emotional incentive for working with disadvantaged students. Although she did not have the educational preparation for teaching Indigenous children, a memorable teacher and her mentors helped shape her teaching style. Moreover, her study of Indigenous people increased her understanding of their cultures, as well as her awareness of her biases. She suggested that teacher education programs provide opportunities for teachers to

immerse themselves in cultures other than their own, as well as to reflect upon their perspectives of various cultures.

A factor that both supported and constrained Ms. Kao's work as a teacher was her school's policy of grade-level collaboration. The school gave grade-level teams the autonomy to design their own curricula and lesson plans. Team members met regularly to share their teaching problems and strategies. One constraining factor was the shortage or unavailability of time for meetings. Also, Ms. Kao felt constrained by her team when they did not adopt her proposed innovations. Other factors that constrained Ms. Kao's teaching and Indigenous students' learning about their culture were certain school policies and the shortage of parent involvement. Because of the low population of Indigenous students, the school did not emphasize the preparation of teachers for teaching Indigenous students. Ms. Kao had a long-standing desire to develop a program for Indigenous students to learn their mother languages and to involve Indigenous parents in the classrooms. However, the lack of support in school policies and the low participation of parents in the classroom virtually precluded the teaching of Indigenous languages and culture.

## CHAPTER 7

### DATA ANALYSIS AND IMPLICATIONS

This chapter, consisting of six sections, analyzes the data accumulated in this study of the three selected Taiwan teachers who are the subject of this work. The first section describes the conceptual framework employed to analyze the data. The next three sections use emergent themes to organize the data and to address research questions, including the teachers' pedagogical practices and their guiding beliefs and knowledge, the teachers' experiences that shaped their practices, beliefs and knowledge, and contextual factors that influenced their teaching of Indigenous students. Those sections compare and contrast the study's findings to dominant themes found in the literature on the effective teaching of minority groups. Findings are presented by way of thematic similarities and differences. The final section identifies several implications for teacher education and school administration, based on the study's findings. Also, implications for future research directions are included. The conclusion provides a summary of the research project and findings.

#### Conceptual Framework

This study set out to explore the beliefs, knowledge, and practices of three exemplary teachers of Indigenous students in different cultural contexts. A review of the literature found that numerous theorists and researchers have wrestled with questions about effective pedagogy for culturally diverse students. Data collected on two of this study's participants, Ms. Huang and Ms. Chen, seemed, at first, comparable to the Ladson-Billings' study of culturally relevant teaching (CRT)

(Ladson-Billings, 1994), because it focused on successful teachers nominated by parents, principals, and colleagues as excellent teachers of African-American students. That was similar to this study's focus on exemplary teachers of Indigenous students. Moreover, the CRT model provided comprehensive findings on teachers' practices of working with students of color, as well as their facilitating beliefs and knowledge, again paralleling this study's research interests. For example, culturally relevant teachers affirmed their students' learning ability and raised the expectations for students to achieve higher academic goals. They acknowledged children's prior knowledge and cultural backgrounds, incorporated students' real-life experiences into the official curriculum, and extended learning activities beyond the classroom and into the community. Moreover, they realized that the students came from deprived and low economic backgrounds, so they acted as the students' "other mothers" and created classrooms that provided feelings of security, intimacy, and trust. The Ladson-Billings' study also found that students in the model classrooms had higher self-esteem and experienced academic success. The CRT model, then, seemed to be a logical conceptual framework for this study.

Analyzing the data for Ms. Kao, however, led to the conclusion that the CRT lens was less applicable as an analytical tool. CRT did not adequately explain many of Ms. Kao's beliefs, knowledge, and practices. For example, Ms. Kao was aware of biases held by her students and herself and dealt with cultural conflict among students. She perceived that the curriculum lacked multicultural perspectives and promoted multicultural respect and understanding in her classroom. These themes were different from the CRT model. Upon further review of the literature, *critical*



*pedagogy* was deemed more applicable for understanding and giving meaning to the data for Ms. Kao because it emphasizes teachers as “transformative intellectuals” (Giroux & McLaren, 1986, p. 303), who continue to assess their beliefs and prejudices while relating to people from different ethnic groups, and who transform the injustice that occurs in the outside world to social justice in teaching. The theorists also point out that the minorities’ history, perspectives, and culture are being ignored or biased in curricula. Hence, there is no way for marginalized students to find themselves, in the context of their own cultures, in the curricula (Asante, 1991; Banks, 1993). Critical pedagogy allows educators to look critically at issues of power, challenging and questioning specific influential values, beliefs, and interests that represent the realities of society. It encourages teachers to take a politically active stance against all forms of oppression and to treat students as if they should be concerned about it. For that to occur, critical theorists suggest that teachers integrate life experiences of disenfranchised students into the official curriculum in order to affirm diversity and to stimulate their interest in learning (Asante, 1991; Banks, 1993). Moreover, critical theorists suggest that teachers create a classroom of freedom and democracy (Freire, 1970; Giroux & McLaren, 1986). Teachers and students should engage in dialogue, share experiences, and struggle together, creating a vision of social justice.

Overall, the CRT model and critical pedagogy point out that successful teachers of culturally diverse students are willing to affirm diversity, able to develop students’ academic capabilities, and are committed to teaching for social justice. That vision combines strategies and dispositions to create a pedagogy of culturally relevant

teaching that builds bridges between the culture of the classroom and that of its students. It manifests a genuine caring about students' academic and social needs in order to help them succeed. It demonstrates a deep sense of moral and ethical accountability to be aware of personal prejudices and to affirm students' diverse voices, ideas, experiences, and contributions. The voluminous data for this study have been measured against the principles advanced by those two models.

### The Methodology and Rationale of Teaching Indigenous Students

This section documents a cross-case comparison of the Indigenous-related beliefs, knowledge, and practices of the three studied Han Chinese teachers of Indigenous students. The data analysis identified five common characteristics to compare: (a) self-confidence and commitment, (b) differentiated expectations, (c) cultural pedagogy, (d) character development, and (e) an ethic of care. Using those five characteristics, this section compares the teachers' beliefs, knowledge, and practices, first, with the literature on effective teachers of minority students and, second, among themselves, in the studied cultural contexts.

#### *Self-confidence and Commitment*

Teachers in the study by Ladson-Billings (1994) showed strong beliefs about working with students of color. They believed they could make a difference in students' achievement and development. They rejected the status quo for African-American students and were committed to helping them improve. The data analysis for this study showed strikingly similar beliefs by the subject teachers. They valued the individuality of their students and conveyed a sincere love for each of them. Much of their enthusiasm in the classroom appeared to stem from their strong self-

confidence. Ms. Huang felt that she could make a difference in her students' lives. Ms. Chen demonstrated that she was a determining factor in her students' success. Ms. Kao believed that teaching was a job that she could commit to, and she felt satisfaction when her students succeeded. With self-confidence and zeal, the three teachers clearly conveyed a commitment to and an accountability for their students' learning. They realized that their students had problems, but they persisted. They accepted the responsibility to help their students. Those attributes helped to define them as successful teachers of Indigenous students. The joy of successful experience was, in fact, reciprocal: the students were proud to succeed—because their teachers refused to let them fail; the teacher felt rewarded when their students performed well and progressed.

The three teachers reflected on their teaching experiences and their imperfections as teachers. None of them was satisfied with her knowledge of students or her teaching skills. Rather, the teachers wanted to deepen their knowledge and to expand their repertoires of teaching methods. They were open to new ideas and took advantage of professional development opportunities. Their teaching careers were experiences of perpetual learning. They were willing to modify their teaching methods in the light of new findings and ideas. Their commitment to such a journey was an integral part of their success.

A subtle difference among the three teachers was found in their awareness of their beliefs about Indigenous students. Critical theorists expect teachers to analyze their beliefs about and prejudices toward other ethnic groups and to transform the injustices of the outside world through social justice in their teaching (Giroux &

McLaren, 1986). Interviews and observations provided little evidence that Ms. Huang and Ms. Chen questioned their assumptions and values regarding their Indigenous students. Ms. Kao, though, seemed to struggle with her perspectives about her Indigenous students. She acknowledged that her personal biases affected the way she perceived and interacted with them. However, her study of Indigenous education and culture sharpened her awareness of her biases and the prevalence of racial intolerance among her Han Chinese students. To deal with racial-bias issues, she stayed aware of her own biases in order to keep them from affecting her interactions with the students. She also held open and frank discussions with them on racial issues, especially biases, in order to improve their sensitivity to cultural diversity and to dispel tendencies toward cultural stereotyping.

#### *Differentiated Expectations*

Ladson-Billings (1994) found that excellent teachers of students of color held a similar belief about learning; namely, that all children were capable of learning, regardless of their backgrounds. That common belief was reflected in the teachers' teaching styles. They had very high academic expectations for their students. They taught in a manner that provided support for all the students, regardless of the prior experiences they brought to the classroom. The children were encouraged to welcome new academic challenges and to achieve the ever-rising expectations.

Consistent with the professional literature, the teachers in this study believed that their students were capable learners, and that teachers were responsible for developing students' potential. They affirmed their students' learning ability and encouraged them to attain their potential. They pointed out that children, as unique

individuals, learned in ways that were varied, not identical. They also believed that teachers had to discover what their students could and could not achieve and to set realistic expectations according to the children's individual differences. By participating in the setting of their goals, the students were more motivated to attain them, reveling in their accomplishments along the way. The teachers believed that, without that kind of realistic goal setting, excessively high expectations could lead to frustrating failures.

In contrast to the literature, the ideological expectations of the three studied teachers seemed not to apply to their teaching of the mandatory curriculum to their low-achieving Indigenous students. Interviews with and observations of the teachers showed that virtually all their efforts and instruction for the Indigenes focused on the mastery of details but rarely on higher-level thinking skills. To help students master the basic skills, Ms. Huang steadfastly presided over practice, review, and testing until the students achieved mastery. Ms. Chen separately grouped the slow and quick learners to meet their respective needs. However, the low-achieving students were often helped with the use of basic key-word reading skills and with analyzing and mastering the solution process for mathematics problems. Ms. Kao led students' problem solving and provided simple, fixed procedures for low-achieving students to follow. She also verified their understanding by asking questions. However, she asked only simple questions, whose answers did not require inferential reasoning, which she expected from only high achievers.

Such simple, low-level skills were necessary, especially for students with a history of low achievement and shrouded by the myths of inferiority. Lower goals

provided lower-achieving students with opportunities to experience success, thereby improving their achievement record and self confidence (Delpit, 2006). Findings from this study illustrated that point of view. Being challenged to learn only basic skills, and encouraged to attain their academic capacity, the students were equipped to understand the subject content and build up their confidence in learning. However, such low-level teaching might possibly have been a disservice to the low-achieving Indigenous children, not only because it focused on such a limited definition of learning, but also because it caused both the teachers and the students to narrow their vision of teaching and education. There was a risk that the children might never be exposed to a more rigorous, challenging, and satisfying curriculum or gain access the higher-level knowledge base (Dilworth & Brown, 2001). They could only be expected to master the curriculum but not to develop the higher-order thinking skills that they would need to become competitive with the high achievers.

Contrary to their counterparts in the professional literature, the studied teachers held negative opinions and beliefs. They blamed the low achievement and learning difficulties of Indigenous students on laziness and other personal characteristics that blocked their motivation to learn. They did not take into account other variables, such as the quality of instruction, teaching styles, and pedagogical issues that might impede students' learning. They simplistically assumed that if students just worked harder, they would be successful. Using guided-work techniques, the teachers engaged in one-on-one instruction and coaching, usurping recess periods and after-school time to help deficient students complete more work.

The persistence of the teachers was indisputable. They were willing to do everything necessary to help their students. They tutored before and after school. They made the students work harder and longer. Undeniably, they worked hard. Unfortunately, their implementation of a low-level curriculum and their low-level remedial efforts might have done more harm than good if they were not taught within contexts that provided meaning for the students (Delpit, 2006). That kind of instruction—skills mastery and repetition—has long been associated with less meaningful and less interesting instruction. Students were not required to think critically about what they were learning and to know its value to them. That tended to reduce their interest in the material and to the entire educational process. For children already turned away from learning, the intended remedy might have made them feel bored, less motivated, and less focused.

Thus, the well-intentioned participating teachers, and their schools, might have become the unwitting instruments of *social reproduction* (Freire, 1970), perpetuating a vicious cycle of low-level curriculum and remedial care that constricted the boundary of the low-achieving children's learning and development. As Delpit (1995) pointed out, "a skilled minority person who is not also capable of critical analysis becomes the trainable, low-level functionary of the dominant society" (p. 19). A two-track system, as Ms. Kao perceived, sends the high achievers off to college and further opportunities, while the low achievers are destined to survival on basic skills and to employment in minimum-wage service jobs.

### *Cultural Pedagogy*

The three teachers in the study believed that the curriculum disadvantaged Indigenous students. The children's lack of relevant life experiences was a recurring theme in all the teacher interviews. The teachers realized that Indigenous students brought to school experiences that the curriculum failed to acknowledge and appreciate. The students had to use their imagination, rather than their life experiences to comprehend the substance of their school work. With so much of their education being, then, so abstract and theoretical, many of them gave up.

One of the methods used by the teachers to lessen the gap between the mandatory curriculum and the Indigenous students' life experiences was similar to the Ladson-Billings model of culturally relevant teaching (Ladson-Billings, 1994). Her model showed that minority students tended to perform better and had more-rewarding school experiences when their school environment was sensitive to their own culture. This study found some evidence to justify labeling the subject teachers' methods as culturally relevant teaching. They believed that teaching should incorporate students' cultural backgrounds in order to facilitate their content understanding and learning interests. Their belief in culturally relevant teaching was reflected in their practice of making learning relevant to the students' life experiences and learning styles. Ms. Huang, for example, designed some alternative activities that were relevant to the students' out-of-school experiences in order to facilitate their understanding in contexts that were familiar to them. She also designed some outdoor instructional activities that were compatible with students' living environment and their physically active learning styles. Ms. Chen described ways that she used role-



playing and in-depth study of tribe resources to help students connect their culture with the school's curriculum. She also discovered Indigenous students' drawing talent, so she incorporated art into her teaching of writing, which increased the students' understanding of and interest in writing. Evidence was found to verify that teaching in a culturally relevant way promoted students' active participation and stimulated their learning interests.

This study's participating teachers recognized that the experiences and learning that Indigenous students brought into their classrooms made learning more relevant and meaningful for all the students. However, the teachers' practices were not always consistent with the premises of culturally relevant teaching. One highly significant finding related to their use of cultural interaction. Ms. Huang and Ms. Chen believed that the isolated tribal life of Indigenous students restricted and deprived them of life experiences needed to absorb the curriculum. They believed that, most importantly, providing their students with cultural stimulation in the city would make them more receptive to comprehending the curriculum. Therefore, they took students to the city, exposing them to different, background-building experiences. They believed that students benefited from the cultural interaction, broadening their view of the world, increasing their understanding and their interest in learning. Their commitment to help Indigenous children academically was unquestionable. However, their beliefs about increasing students' life experiences and their practice of taking them to the city were questionable. The cultural interaction might imply a hidden agenda in the education of minority students and a disguise for transmitting for the dominant cultural values (Giroux, 1981; Irvine, 1989). Consciously or not, the teachers might

have imposed on students their own judgment that tribal life was inferior to city life, that city life was more prosperous, and that students should choose city life and change their lifestyles in order to succeed. Although study data contained no evidence of adverse consequences, the potential problem, undermining Indigenous students' tribal values, must be recognized.

Unlike Ms. Huang and Ms. Chen's method of content comprehension through cultural interaction, Ms. Kao's method was based on her view of curriculum-design pitfalls. She perceived that the curriculum lacked multicultural perspectives; consequently, Indigenous students often had to study concepts and issues primarily from the point of view of the mainstream group. There was no way for culturally diverse students to receive multicultural perspectives. Therefore, she tried to understand each student's backgrounds and design culturally interactive activities to promote multicultural understanding. To her, student diversity was fascinating and a positive learning influence, so she modeled and encouraged experience-sharing to help students contribute to the learning process. She also invited Han Chinese parents and Indigenous parents to the classroom to discuss their specialties. Moreover, she provided time for students to use and to teach their mother languages, to visit Indigenous cultures, and to prepare and present reports on various dimensions of cultural life.

A deeper look into the three teachers' cultural pedagogy revealed contextual differences. Ms. Huang and Ms. Chen, who taught in Indigenous schools, exerted considerable effort to acquire information about their Indigenous students and their community. They were willing to adapt their teaching to meet Indigenous students'

learning styles and to incorporate community resources into teaching. Their practices were consistent with culturally relevant teaching.

Ms. Kao, who taught in a culturally diverse classroom, did not specifically design her teaching to be culturally relevant to the Indigenous students. As she expressed her consideration, “I cannot design teaching based on Indigenous culture, because they are a minority group. It would be unfair to the other students.” Critical pedagogy was more applicable to explain and make meaning of Ms. Kao’s practice. She was aware that the curriculum design heaped inequities on the Indigenous students (Asante, 1991; Banks, 1993), so she made a conscious effort to be sensitive to and respectful of her students’ experiences and to promote mutual understanding. She democratized her classroom to show respect for students’ opinions and experiences (Freire, 1998; Giroux & McLaren, 1986). She served as a facilitator to ensure that every student had the opportunity to contribute his or her perspectives and experiences in classroom discussions in order to affirm diversity and to stimulate their interest in learning.

#### *Character Development*

The studied teachers attended to the social aspects of teaching by focusing on social skills. They saw school as valuing students’ academic development but doing little to prepare them to be “decent persons,” to use Ms. Chen’s term. They believed that the role of teachers was not merely to teach subjects but to develop children to become responsible and productive members of society, to be self-sufficient, and to get along well with others.

To develop students' self-responsibility, the teachers tried to instill the habit of making an effort in the classroom more often. That approach related their perception of the Indigenous life style as relying on social welfare programs, rather than making a living for one's self. The teachers targeted signs of indifference, of contentment with the status quo, and the absence of ambition and of a desire to work harder. Frustrated by parents' attitudes, the teachers believed that they should take on the responsibility to instill in students the virtue of self-sufficiency. They urged them to break the life-style cycle and to become self-reliant and live better lives than their parents.

But contrary to their intentions, it is quite possible that the assimilation approach of the Han Chinese teachers tended to perpetuate the status quo. Underlying their staunchly held views about the Indigenous people was the assumption that the life style of the Indigenous parents was substandard and unacceptable, and that it had to be improved. The Han Chinese lifestyle and status were the implied objectives for the students. Often unquestioned and unstated was the basis for the distinction between Indigenous home values and the Han Chinese teachers' values. The teachers did not try to understand the values that the students learned from their families. They simply rejected Indigenous values and tried to instill mainstream Han Chinese values for attaining a high standard of living. The children could not honor and respect their own culture when their teachers did not honor and respect the children themselves (Delpit, 2006). This study found no indication that the teachers realized the danger of emphasizing Han values and deprecating Indigenous parents' lifestyles and social status. Conceivably, Indigenous children in the classes of Han Chinese teachers could

be trained to reject their cultural and familial life styles. No teacher suggested that her responsibility should be to understand and respect the values that their students already possessed, so that they could be developed and judged in accordance with the values of their own culture.

The three teachers expected students to get along with each other and to behave. They had clear behavior standards, and they administered punishments and rewards fairly. In addition, they exhibited good interpersonal skills, being empathetic and attentive listeners. They sought explanations for students' misbehavior, withholding judgments until they had conducted appropriate interviews. They counseled students who behaved errantly or who were upset by unexpected events at home or school. They provided emotional comfort and guidance for proper behavior. Unfailingly, it seemed, the children followed their teachers' instructions. No evidence suggested that the students resented their teachers' interactions or were upset by them; rather, they seemed to feel cared for and loved by the teachers.

The studied teachers approached disciplinary issues from different perspectives. Ms. Huang and Ms. Chen considered individual students' personality and personal characteristics. They took into account the students' background and tried to respond to individual needs, not specifically based on their culture. Perhaps they were not aware of cultural differences that might explain Indigenous students' behavior; or, perhaps, it was the cultural composition of their classrooms. In Ms. Huang's and Ms. Chen's classrooms, where Indigenous students were the majority, behavior problems were seldom caused by cultural problems. By contrast, in Ms. Kao's classroom, where Indigenous students were in the minority, there was

considerably more racial prejudice and intolerance and the Indigenous students were discriminated against. To deal with the problem, she brought racial issues to the forefront to help the children learn to respect cultural differences and to develop empathy for each other. Through awareness and guidance, Ms. Kao helped her students confront and reduce prejudiced behavior and develop positive cross-cultural relationships.

### *An Ethic of Care*

As in other studies of teachers in Taiwan (Chou, 2005; Chung, 2003; Lee, 2003; Wu, 2000), the teachers in this study spoke of the parents' laissez-faire educational attitude and of poverty as key factors in the underachievement of Indigenous students. They believed that Indigenous parents were uncaring and incapable of helping their children either because of cultural values or because of the parents' poor education. They saw that many Indigenous parents had low socio-economic status and had to struggle to provide basic needs for their families. Those circumstances led the teachers to make a simplistic assumption: the major reason for the academic failure of poor, low-achieving Indigenous students was that they received no supplementary academic assistance at home. The teachers concluded that, in the absence of any outside assistance, the entirety of achievement and learning by those children had to be accomplished at school and by the teachers.

The studied teachers further assumed that Indigenous students from poverty-ridden environments failed to receive training and teaching at home; therefore, they needed to enter school to be successful. That assumption might have been true, because a family's social, economic, and educational conditions enmesh to

disadvantage minority students (Rothstein, 2006). Some parents did not support their children's education and could not provide a healthy home environment for their children because of the parents' own dearth of education and low income.

The teachers' assumption might also be problematic. Parental support takes many forms and is manifested in various nontraditional, non-Han Chinese ways. Even uneducated parents can provide meaningful support for their children—a possibility that the teachers failed to realize. Poor students can acquire a vast array of knowledge from their complex social network outside of school (Moll et al., 1992). Evidence in the studied teachers' classrooms showed that the Indigenous students were eager to share and had much to contribute when the teaching connected to their real-life experiences. However, the teachers seemed to limit the definition of home learning to homework completion and textbook study. They needed to be aware that the children came to school with different kinds of knowledge. They needed to learn more about the culture and lifestyle of their students; otherwise, they might never recognize the support that Indigenous parents provided for their children.

Although the teachers expressed negative opinions of Indigenous home life and felt frustrated by the lack of parental support, they did not give up on their disadvantaged students. Instead, they empathized with them and identified with their circumstances and needs. They perceived family pressures that were beyond a young child's coping capabilities, and they believed that the children needed teachers who truly cared for them. Therefore, they became surrogate mothers and considered the students as members of their extended families (Ladson-Billings, 1994). They ensured that their students were cared for, much as if they were their own children.

They provided a safe and nurturing environment for their students and made resources available for their needs. Students in the teachers' classroom were free to test their ideas and to share their experiences. They enjoyed interacting with the teachers. Such classroom interactions helped build trusting relationships that facilitated students' learning.

The teachers' caring behavior was also shown in their efforts to build relationships with their students' parents. To improve communication with parents, the teachers visited their homes, telephoned them, and sent notes and letters. The objective was to learn more about the children's backgrounds and the parents' expectations, and they repeatedly tried to involve the parents in the children's education.

There were subtle differences in the three teachers' care giving. Ms. Huang and Ms. Chen showed much more effort than Ms. Kao to reach parents outside the school. Ms. Huang perceived that Indigenous parents shunned Han Chinese teachers, so she reached out to each student's family to build trusting relationships. Ms. Chen perceived that Indigenous parents did not understand their children and lacked the skills to communicate with them. She acted as a broker to build bridges of understanding between the parents and their children. Ms. Kao, on the other hand, showed genuine respect for the Indigenous parents, but sometimes she seemed to not want the parents to interfere with her teaching.

Moreover, the Indigenous area lacked resources and the children had major needs. They needed teachers who would give them more attention and care. Therefore, unlike Ms. Kao, who focused mostly on students' academic needs, Ms.



Huang's and Ms. Chen's care was based on a full consideration of each student, both within and outside the school. At its most basic level, the teachers' mothering role focused on the children's physical health and comfort; they frequently worried about whether a child had eaten or needed to see a doctor. Furthermore, they understood that many of their students were from families with financial difficulties, so they provided monetary support and other resources. In other words, Ms. Huang and Ms. Chen, who taught in Indigenous schools, focused on supporting the whole child (Noddings, 1995)—the full range of physical, emotional, financial, and academic needs.

### *Summary*

The conceptual framework for this study was developed from the relevant professional literature. Two models of effective teaching for minority students—culturally relevant teaching (Ladson-Billings, 1994) and critical pedagogy (Asante, 1991; Banks, 1993; Freire, 1970; Giroux & McLaren, 1986)—provided the theoretical lens for analyzing the data. The findings of this research showed that the studied teachers exhibited many of the characteristics identified in the literature as effective teaching methods for minority students. The teachers demonstrated high levels of self-confidence for teaching Indigenous students, and they were able to instill confidence in their students, as well. They realized that there was a gap between the mandated school curriculum and the Indigenous students' life experiences. They believed in culturally relevant teaching and took into consideration the students' life experiences and learning styles when developing their teaching plans. Moreover, they acknowledged students' family backgrounds and empathized

with and committed themselves to their students. Their empathy for the students' home lives was manifested in ways that built caring relationships with their students.

The findings of this research also showed several instances of teachers' negative thinking and of assimilation strategies that were incongruent with models in the literature. Although the teachers identified curriculum design as a reason for their students' underachievement, they also held negative views of the students' intellectual energy and motivation, of the parents' commitment to educational goals, and of families' history of low priorities for children's education. The teachers rarely discussed alternative methods for improving their teaching methods. Although they spoke of setting realistic expectations according to the children's individual differences, they followed a low-level curriculum and remedial program for their low-achieving Indigenous students. Moreover, they spoke of their responsibility to develop human beings, suggesting the importance of deeper, universal values, but they showed contempt for the lifestyle of typically poor Indigenous parents, and they modeled values for students to achieve a different and better life than that of their parents. Ms. Huang and Ms. Chen particularly talked about bringing Indigenous culture into their teaching; nevertheless, to increase their students' cultural activities, they took them to the city, possibly deprecating their tribal life. The teachers' efforts to instill their own beliefs and values in the classroom and to devalue Indigenous parents and community life might indirectly have promoted the presumably superior Han Chinese—a direct contradiction of the goals of culturally relevant teaching and critical pedagogy.

This research found that teaching environments distinctively affected how Indigenous students were taught. Ms. Huang and Ms. Chen, who were in Indigenous schools with a majority of Indigenous students, taught in a more culturally relevant manner. They made meaningful connections with the students' culture and life experiences in order to improve their academic skills. They reached into the community to incorporate community resources into their teaching and to better communicate to parents the importance of equipping their children for academic success. Moreover, they provided wide-ranging care for their Indigenous students, who had greater physical and financial needs than urban students.

On the other hand, Ms. Kao, who taught in a city school with culturally diverse students and few Indigenous students, exhibited teaching practices more like those of critical pedagogy. She was aware of her own racial bias and willing to change her opinions of her students. She acknowledged that the Indigenous culture was ignored in the curriculum and emphasized that a multicultural classroom could not be based solely on dominant-culture norms. Therefore, she accepted cultural differences among students and embraced cultural diversity. She democratized her classroom, welcoming students' different opinions and created a shared-learning community where students learned from one another. She also recognized cultural clashes and prejudice among her Han Chinese and Indigenous students. Her behavior-modification intervention promoted students' development of empathy and tolerance.

#### Teachers' Experiences Underlying Their Teaching of Indigenous Students

Many researchers have found that teachers' beliefs, knowledge, and practices derived from their personal experiences and their teaching careers (Britzman, 1991;

Chou, 2005; Clandinin & Connelly, 1995; Foster, 1995; Lee, 2003; Lien, 2001; Wang, 2003; Wu, 2002). Consistent with the literature, the analysis of the data for this study showed that teachers' schooling experiences, their memorable teachers, and their teaching experiences had an impact on their beliefs about and teaching of Indigenous students.

### *Schooling Experiences*

Each of the three studied teachers found some of their early schooling a struggle. For example, Ms. Huang suffered a misunderstanding with a teacher who accused her of cheating on a test, which destroyed her interest in learning. Ms. Chen had teachers who treated students according to their family backgrounds. As a student from a poor family, she received less attention and instruction. Ms. Kao, who was scarred from a childhood accident, was ridiculed and mistreated by her classmates; consequently, she disliked school. Apparently, the teachers' early negative feelings about education, their expectations, and their early discouragements made them more compassionate. They wanted to become teachers who would be positive, not negative, influences on their students. Ms. Huang, for instance, gave errant students ample opportunities to explain their intentions and actions. She made them feel emotionally secure by listening and talking to them. Ms. Chen avowed not to stereotype or label students but, rather, to treat them equally, regardless their backgrounds. Ms. Kao committed to working with disadvantaged students. She taught her culturally diverse students to respect each other without prejudice.

### *Memorable Teachers*

Aside from the negative childhood experiences that made them compassionate teachers, Ms. Chen and Ms. Kao believed that the way to become a good teacher was to imitate memorable teachers they had experienced as students. As Lortie (1975) pointed out, many teachers remembered some wonderful teachers, and they linked what they did in their classrooms with what they learned from those teachers. Ms. Chen, for instance, developed confidence through her specialties, arts and sports, responding to the recognition and encouragement she received from her physical-education teacher in the fifth grade and her art teacher in junior high school. When she became a teacher, she spoke passionately about finding students' strengths and building upon them. Ms. Kao recalled her fifth grade teacher, who had an informal teaching style and developed close relationships with his students. As a teacher, she tried to establish a classroom atmosphere where students felt comfortable and relaxed, as she had in the fifth grade.

### *Teaching Experiences*

None of the teachers stated that any of their beliefs, knowledge, or methods of teaching Indigenous students was learned in their teacher-education programs. Their teacher training had not adequately prepared them to work in culturally diverse classrooms. Inadequate preservice and in-service training had left them virtually on their own to learn how to teach Indigenous students. Ms. Huang relied mostly on retrospective analysis and trial-and-error modifications of her teaching style. She said, "If whatever I'm doing doesn't seem to work, I try something else. I'm always learning, always changing. The process is always going on." Ms. Chen learned how

to teach by doing. She believed, “Learning by doing is always the best way to improve your teaching.” Ms. Kao learned from students’ feedback. Those who failed stimulated her thinking and motivated her to improve. Over many years of experience the teachers had acquired knowledge and insight about effective teaching methods and practices. As Alexander (2003) pointed out, expertise develops over time. The teachers became experts, with rich knowledge about teaching and about meeting students’ needs.

### *Summary*

An analysis of the data for this study showed that subject teachers’ educational experiences and, especially, their memorable childhood teachers shaped their values and helped them formulate beliefs about and strategies for teaching Indigenous children. None of the teachers felt that they had been adequately prepared to work in culturally diverse classrooms. Their inadequate preservice preparation and their irrelevant in-service training avoided issues related to teaching Indigenous students. As a result, their knowledge and teaching expertise with Indigenous students came from years of teaching experience.

### Contextual Factors Influencing Teaching for Indigenous Students

One of the most important influences on teacher development and practice is found in the context of the school itself. There, on the firing line, a collegial atmosphere among the teachers provides an essential comrade for the pursuit of common goals. However, unity and consensus are difficult to obtain and no easier to maintain. Much of the burden is accomplished under leadership—both formal and informal—that, for better or for worse, imposes “order” on the process. The three

participating teachers found some aspects of the school context supportive but others impeding. Each of them mentioned situations that are grouped below within one of three influential factors: time constraints, the school culture, and Indigenous-education school policies.

### *Time Constraints*

The studied teachers felt pressure from time constraints on their teaching and curriculum design. Because of students' difficulty with comprehending content and writing, Ms. Huang spent considerable time helping them understand what they read and teaching them how to master basic skills—so much time, in fact, that she could not stay on schedule with the mandatory curriculum and instruction. Consequently, she had to use after-school time to conduct remedial work and then attend to her administrative work, even later in the day or at night. She felt burned out because the overload distressed her terribly.

Ms. Chen's time was constrained by her principal's demands. The principal overvalued the school's high reputation and hosted numerous events unrelated to teaching and learning. The inordinate number of school activities not only increased teachers' administrative assignments, it also interfered with their teaching. As a result, Ms. Chen found that she hardly had time to teach in a culturally relevant way and to experiment with her new teaching methods, such as differentiated reading groups.

By contrast, Ms. Kao, who taught in a large school, did not have any administrative duties. Moreover, the principal gave teachers autonomy in their teaching, but they had to cooperate with each other to design their integrated curricula

and instruction. Unfortunately, that effort was constrained because so little time was provided for meetings. In order to not interrupt the mandatory curriculum and instruction, the teachers could meet only during recess and after school, which cut into their personal time.

### *School Culture*

All three teachers believed that their teaching and learning would improve in a collaborative school culture, where teachers would meet to discuss various aspects of teaching, thereby improving their teaching skills. For example, when Ms. Chen was a student teacher, she worked with her mentor to plan lessons and discuss their teaching. In her current school she collaborated with the Indigenous teacher, the third-grade teacher, and interns to design the curriculum and instruction. It was evident that her team-teaching experiences had had a decided and lasting effect. She had received suggestions for improving her teaching, as well as encouragement to introduce changes into her teaching. Ms. Kao's school urged grade-level collaboration. Grade-level teams met regularly to discuss and share their teaching problems and solution strategies. Such collegial interaction and support, coupled with the learning that resulted from collaboration, had increased her teaching effectiveness.

Unfortunately, not all the colleagues of the participating teachers were receptive to collaboration or any other changes in their teaching methods. The studied teachers complained that they were constrained by what Ms. Huang called a "culture of mediocrity" or, to use Ms. Chen's term, a "culture of conservatism." In such an environment, most teachers were satisfied with their teaching and were not inclined to change. Moreover, teachers' personal innovations were prohibited. As Ms. Huang



explained, “It is required that everyone be on the same page. Individual excellence does not please other teachers.” The ambitious participants in this study found themselves in schools with disengaged staff, and they felt some subtle pressure from colleagues. To strike a balance between the school culture and personal innovation, the participant teachers made some adjustments. Ms. Huang and Ms. Kao did what they wanted to do in their classrooms, but for activities that involved other teachers, they tried to fit in and act as their colleagues expected. Ms. Chen, however, was relentless. She persisted in her innovations, hoping to stimulate other teachers to improve, for the good of the students.

#### *Indigenous-education School Policies*

School policy that supports diversity can encourage effective teaching for socially and culturally diverse students (Artiles, 1996). This study’s participating teachers acknowledged the risk of losing the Indigenous culture, and they believed that it was important to have a school policy that encouraged the preservation of that culture. Ms. Chen’s and Ms. Huang’s schools had a policy to provide Indigenous students with the opportunity to learn about their cultural heritage, as the student population was mostly Indigenous students. Their schools hired some Indigenous specialists from the community to teach traditional Indigenous arts, music, and crafts. Teachers in their schools also cooperated to design culture-related curricula and instruction for students to learn about and celebrate their heritage. However, both Ms. Huang and Ms. Chen perceived some problems with the school policy. Ms. Huang believed that the Indigenous-culture program was hindered by the lack of teacher education among the Indigenous specialists and, conversely, by the inadequate

knowledge of the Indigenous culture among Han Chinese teachers. Ms. Chen believed that the school's culture-based activities did not have a long-term effect on students because the principal did not truly value the development of the Indigenous culture, as cultural learning tended only to be superficial in the short term, neglecting the essence of the heritage. By contrast, in Ms. Kao's school there was no policy specifically for providing Indigenous students with an opportunity to learn their culture and language. Ms. Kao explained that one reason was the small population of Indigenous students in the school. Another reason related to the lack of support from Indigenous parents. In her view, Indigenous parents expected their children to learn the mainstream language, even at the risk of losing their own cultural roots.

### *Summary*

Participating teachers' schoolwork was sometimes improved, and sometimes not, by unique conditions and circumstances in their schools: time constraints, the school culture, and Indigenous-education policies. Time constraints prevented teachers from keeping pace with the mandatory curriculum, teaching in a culturally relevant way, and collaborating to design an integrated curriculum.

The school culture of collaboration was a supporting factor; it helped the teachers improve their teaching effectiveness through open dialogue and a free exchange of ideas. However, a conservative, less-motivated school culture among their colleagues hindered their attempts at instructional reform by discouraging teaching initiatives and innovations to achieve one's best teaching.

The school policy of teaching the Indigenous heritage was perceived by teachers as a supportive factor to preserve the Indigenous culture. However, the

policy needed wider implementation by school leaders and increased support from Indigenous parents, as did the teacher-training proposal for Indigenous specialists and the native-culture training for teachers.

### Implications

Given the intended benefits that this study recommends, this section discusses implications for teacher educators and school administrators for improving the education of Indigenous students in various cultural contexts. Then, implications for future research are discussed.

#### *Implications for Teacher Education and School Administration*

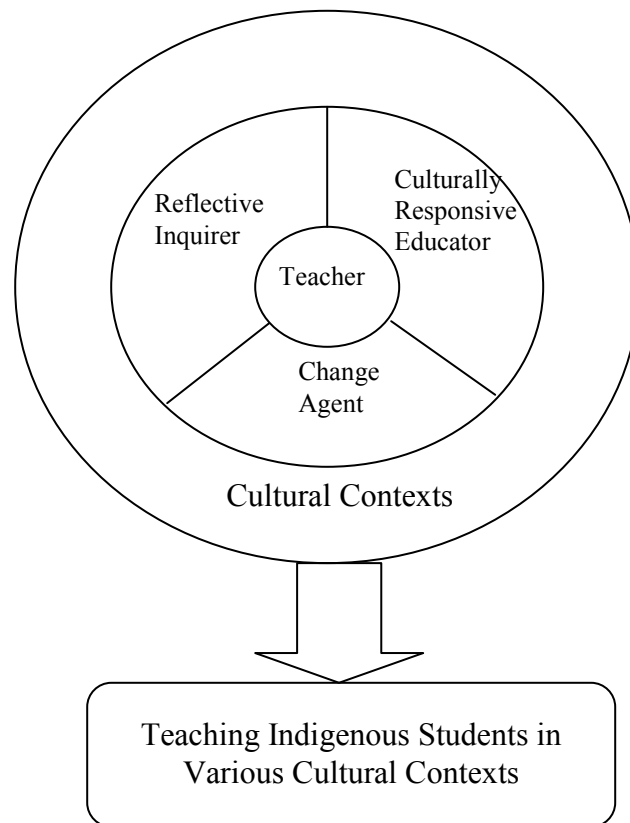
This study relied on two models—culturally relevant teaching and critical pedagogy—to interpret the data. Findings showed that the studied teachers exemplified both models. They believed in students’ learning ability and acknowledged their tribal and family backgrounds. They designed curricula and instructional plans that took into consideration the students’ life experiences and cultural background. They became the children’s surrogate mother to build caring relationships with their students.

Findings also showed that the teachers departed from both models. For example, teachers in the CRT model had high academic expectations for their students and encouraged them to achieve ever-higher academic challenges. By contrast, the studied teachers spoke of setting reachable goals according the children’s individual differences. They believed that, without that kind of realistic goal setting, excessively high expectations could lead to frustrating failures. Also contrary to the CRT model, the studied teachers perceived the Indigenous students as lazy and lacking educational

encouragement and assistance at home—which, in turn, perpetuated the alternative, low-level curriculum and preserved a cycle of remediation. In addition, the studied teachers spoke of their responsibility to develop human beings and attended to the social aspects of teaching by focusing on social skills, which was not covered in the two models. On the other hand, they deprecated Indigenous tribal life and instilled Han Chinese values on all their students, which implied assimilation objectives and a direct contradiction of the goals of the two models. Using both models as filters to analyze the data helped clarify the Han Chinese teachers' effectiveness, as well as their shortcomings in teaching Indigenous students.

Moreover, the findings provided a clearer understanding of the two most relevant models. The study assessed how popular pedagogies, such as CRT and critical pedagogy—which, some claim, are models for effective teaching of culturally diverse students—matched the learning needs of Indigenous students in some but not all contexts. Findings showed that the studied teachers taught differently in different cultural contexts. Effective teaching in the Indigenous areas resembled the CRT model. It not only made learning relevant to the students' community life, it also spread to out-of-school care for their families. By contrast, effective teaching in the city resembled critical pedagogy. Despite her personal bias and the discrimination in her classroom, the participating city teacher sought to instill cross-cultural respect and understanding among the students. Still, each of the two models provided valuable criteria for determining what comprises pedagogical success for minority students. Educational “best practices” should be predicated on a set of cultural beliefs and values grounded in a particular context (Erickson & Mohatt, 1982).

The findings translate into implications for teacher education and school administration. A conceptual framework is suggested to help teacher educators and school administrators prepare teachers to effectively teach Indigenous students in various cultural contexts. The framework emerged from the findings, as well as from referenced sources and modifications of the CRT and critical-pedagogy models. The goal is to prepare teachers to be (a) reflective inquirers; (b) culturally responsive educators; (c) change agents; and (d) effective in various cultural contexts (see Figure 7.1).



*Figure 7.1* A conceptual framework for preparing teachers to teach Indigenous students in various cultural contexts

*Prepare teachers to be reflective inquirers.* The findings of study showed that the three participating teachers reflected on their teaching practices and sought to improve them. However, the findings also revealed that the teachers brought their own cultural perspectives into their classrooms. For example, they tended to relate the problems of student underachievement with personal characteristics of the student or the family. They resented that Indigenous parents had no desire to better themselves, and that their children were lazy; so, there was no support or learning at home. However, they rarely questioned their presumptions about Indigenous children and families or considered pedagogical variables that might cause the failure of their Indigenous students.

Those findings should alert educators about the importance of developing an improved awareness of how their own cultural heritage and personal identity shape their beliefs about other cultures and how those intrinsic beliefs affect their perceptions and actions. This study found that teachers' past experiences significantly affected their beliefs and practices. For example, they pointed out that negative childhood experiences motivated them to do something positive for their students, because they did not want to see their students be hurt, as they had been. The connections drawn by the teachers between their past and their present suggest that examining teachers' biographies might well provide important clues about the origins of their current beliefs, knowledge, and disposition to become teachers. This study suggests that teacher educators and school administrators provide opportunities for teachers to examine their actions, assumptions, and values through writing reflective autobiographies and journals. Narrative inquiry can help teachers reflect on how the

cultural context and conditions in which they grew up have influenced the way they are and also to question their belief system about learning and teaching (Clandinin & Connelly, 1995; Darling-Hammond et al., 2002). Through awareness of their own cultural values and experiences, teachers are more likely to develop sensitivity to their attitudes toward minority students and to facilitate effective interaction between themselves and their students (Spindler & Spindler, 1993; Tatum, 1992).

In addition, colleagues, as constructively critical friends, can offer support and encouragement to enrich teachers' personal reflections on their work (Davies, Hogan, & Dalton, 1993; Greenleaf et al., 1994). This study suggests that teacher educators and school administrators open up a dialogue designed to help teachers share their beliefs and experiences with others in a learning group. They could be encouraged to talk about race and culture, particularly with regard to their basic views on the education of Indigenous children, the role of parents in the education process, and the causes and effects of poverty in communities. Through sharing with others, teachers might identify some beliefs that are imbedded in their value systems. For example, teachers in this study believed that Indigenous children were lazy and lacked motivation to learn, and that there was no learning at home. Teacher educators and school administrators could encourage teachers to identify any biases they notice in the sharing process and could help teachers reevaluate their beliefs about Indigenous students, their parents, and their cultures. They could help teachers look beyond superficial assumptions about Indigenous students and their parents by examining how their teaching might exacerbate students' learning problems. For example, the studied teachers' practices showed that students became less focused and less

motivated when their teachers emphasized less meaningful activities, such as the low-level curriculum and remediation. When teaching was relevant to students' life experiences and learning styles, they were highly engaged and motivated to learn. That significant finding served as a reminder of the powerful influence teachers have in shaping students' performance. They can either increase or decrease academic engagement, providing a mechanism to alter outcomes for students. Awareness of that reciprocal relationship can help teachers focus more on the interplay between their teaching and students' learning, thinking about what helped students do well and why students did not do well, rather than attributing problems solely to the students or their families.

*Prepare teachers to be culturally responsive educators.* The three participating teachers in this study showed dedication to their jobs and their students. They sought opportunities to try new ideas and discovered many resources for improving their teaching and learning. However, all three teachers pointed out that their teacher-preparation programs did little to prepare them to teach Indigenous students. There were rare workshops or in-service programs that addressed the particular needs of Indigenous students. Each of the teachers suffered innumerable problems during their first year of teaching, and they had to rely mostly on their own developing skills for solutions. Without adequate preparation, they had only a limited understanding of their students' cultural background. They consistently demonstrated cultural assimilation in their teaching practices. They sought to instill mainstream values and to deprecate the Indigenous life style—actions that surely hindered the development of Indigenous students' own cultural identity.



Those findings convey an immediate need to change curricula and instructional practices of teacher education and professional development. This study's findings about Ms. Kao show that contact with and the study of Indigenous people sharpened her awareness of her racial biases and her understanding of Indigenous culture, which helped her change her behavior to achieve effective interaction with her culturally diverse students. If understanding is the key to accepting diversity, this study suggests that teacher educators provide opportunities for teacher trainees to receive cultural knowledge. Teacher educators should choose materials that address cultural issues, such as Han Chinese power and privilege, the history of the oppression of the Indigenous people, social class and poverty, and equity and justice. Equipped with such cultural knowledge and a broadened perspective of the human condition of the Indigenous people, teachers could better understand their responsibility to develop pedagogies that provide equity and excellence in the educational experiences of poor children and minority students (Darling-Hammond et al., 2002; Garibaldi, 1992; Ladson-Billings, 1994).

In addition, teacher educators could help teachers conduct studies about Indigenous students and their cultural background, drawing information from parents, native informants, Indigenous colleagues, history and literature. By learning as much as possible about their Indigenous students and their communities, teachers—rather than deprecating the Indigenous life style and imposing mainstream values on students—could meaningfully reevaluate their perspectives of the Indigenous culture and lifestyle, so as to help students affirm their values and respect their native culture. Moreover, rooted with a new, deeper understanding of their students' wealth of

intrinsic knowledge, teachers could provide enriching educational experiences for culturally diverse students, such as culturally relevant projects to accommodate students' cultural characteristics or cultural interactions to promote multicultural understanding. Such teaching and activities could help students embrace cultural diversity in all its richness, break down discrimination, and defuse cultural conflicts. Then, Indigenous students could better develop self-esteem and appreciate their cultural heritage.

Teacher-education programs should not stop with just providing a theoretical knowledge base. It is crucial to ensure that teachers receive practical skills that produce effective learning. Ms. Chen continued to build upon the valuable training that her mentor teacher provided during her development and preparation to teach; that is, insights from actual experience, somewhat compensating for some of the gaps in Ms. Chen's formal education. This study suggests that teacher educators and school administrators carefully select mentor teachers who have strong educational commitments to and meaningful experiences with teaching Indigenous children. They would serve as guides and role models, passing on effective teaching methods and information, such as the characteristics of children in various cultural contexts, the selection of instructional materials, the design of instructional activities and evaluation methods, and discipline strategies. Also, school administrators could sponsor rewarding forums in which teachers could participate, such as peer discussions of problem situations and teaching dilemmas, and solution methodologies. Learning from master teachers' experiences would give less-experienced teachers

valuable insights into how to make their curricula more multicultural and their teaching more culturally appropriate for their classrooms.

*Prepare teachers to be change agents.* Findings from this study demonstrated that the teachers' work was constrained by time limitations for teaching and curriculum design and by a conservative school culture that inhibited instructional innovation. Findings also showed that the teaching and learning of Indigenous culture were impaired by a lack of support from school leaders and Indigenous parents and a lack of training for teachers. Constrained by such factors, the studied teachers went out of their way to find resources and methods on their own. Undeniably, the participating teachers were hard workers. They devoted extensive attention and effort in their classrooms to overcome obstacles that impeded their teaching and their students' learning. However, they did not always see themselves as agents of systemic change. They understood that systemic problems needed to be addressed, but faced with a rigid system, they consistently conceded to the status quo. They wanted to avoid the frustrations of fighting a deeply entrenched system, so they focused on changing their classrooms and individual students. Another probable explanation was their low expectations for achieving systemic change and their lack of information about how to change a defective system. Study findings showed that the school system failed to build a support system for teachers trying to instigate changes that would improve the teaching of culturally diverse students. Enlightened school administrators would prepare teachers to become change agents, valuable participants in the transformative process for educational systems (Fullan, 2002; Guskey & Peterson, 1996).

A change of practice or system is facilitated by a school structure and culture that support change. The development of a new structure and culture begins with a shared vision and a commitment by both teachers and administrators (Fullan, 2002). This study reinforces other researchers' perspectives (Artiles, 1996; Cummins, 1989; Ladson-Billings, 1994), showing that Indigenous students are more motivated to learn when their school environment, policies, and instruction are relevant to their culture. That finding emphasizes the importance of creating a school context that enables Indigenous students to learn successfully. The entire school climate should center on commitment to, appreciation for, and promotion of cultural diversity. Principals play an important role in determining school policies and teacher attitudes towards students (Elmore, 2000; Fullan, 2002). Teachers would likely be more motivated to teach for cultural diversity if school leaders advocated a commitment for the improvement and development of Indigenous education. This study suggests that principals display a shared vision of their schools' mission for making a difference in the education of Indigenous students, raising their achievement and developing their culture. Then, teachers would have clear objectives to guide their teaching. Students would have opportunities to reach the highest levels of academic excellence and to develop their own cultural identities.

A clear and challenging mission statement would require teachers to employ their best practices for the education of Indigenous students. A learning community is vital to creating a positive school culture that encourages meaningful change leading to continuous instructional improvement (Barth, 1990). The participating teachers in this study pointed out that collaboration among teachers was substantively productive

and useful, giving them access to valuable knowledge about teaching effectiveness. Therefore, this study suggests that school leaders build a learning community to promote shared learning and collective problem solving among the school staff. In effective learning communities, teachers are knowledge seekers as well as givers (Fullan, 2002). They are provided with opportunities to meet regularly to explore culture-diversity matters, to share the successes and failures of such efforts, and to support each other when dealing with difficult situations in their classrooms. Having their innovations and teaching styles recognized, analyzed, and evaluated would foster professional growth and better equip participants to meet the needs of their Indigenous students.

Learning communities cannot develop without the investment of teachers' time and energy. To establish a supportive structure to nurture change, school leaders need to understand teachers' concerns to improve working conditions (Fullan, 2001). The studied teachers' voices, however, had been muffled in their school settings. They were constrained by time limitations and workloads, and they were rarely given opportunities to express their needs. They were required to comply with demands mandated by school officials. This study suggests that school administrators involve teachers in decision-making by establishing a network of decision-making teacher forums. Given the opportunity to participate in professional dialogue, teachers could gain additional respect, expressing their opinions, addressing their needs, proposing improvements, and even questioning reform mandates. Given a voice in the system allows teachers to engage in the democratic process of re-creating of the school context (Beyer, 1996). School leaders can learn from teachers' opinions on policies

and practices for staff development and school conditions, and they can become aware of teacher problems that cause frustration and burnout.

*Prepare teachers to teach Indigenous students in various cultural contexts.*

This study showed that different cultural contexts produced different school policies and teaching practices for Indigenous education. The studied Indigenous area was an isolated community with unique cultural resources. Schools were required to have a policy for the development of the Indigenous culture. The policy required teachers, as well as Indigenous specialists from the community, to teach culture-related activities. In addition, most of students in Indigenous areas came from poor, seriously needy families. The studied teachers were committed to the families and the community. They not only made learning relevant to the students' community life, they spread their out-of-school care among the families. Their teaching resembled the culturally relevant model. Study findings led to recommendations for teacher-education curricula to meet the teachers' needs in Indigenous areas. Teacher educators should consider the model of culturally relevant teaching for teachers working in wholly Indigenous classrooms. That process should aim to provide a foundation of theoretical base and methodology for teachers to design and select appropriate instructional materials relevant to their students' needs (Ladson-Billings, 1994).

Teachers should be encouraged by school administrators to learn from the Indigenous community. Ms. Huang searched for information from Indigenous volunteers and community institutions, such as the Community Development Association, to learn about Indigenous culture. Ms. Chen collaborated with an Indigenous teacher and Indigenous parents to design culturally relevant instruction.

Through such experiences, they learned about the students, their families, and their communities, and then designed their curricula and instruction around the gathered information and materials. In addition, Ms. Huang pointed out that the Indigenous-culture program was hindered by inadequate knowledge of the Indigenous culture among Han Chinese teachers and, conversely, by the lack of teacher education among the Indigenous specialists. This study suggests that school administrators promote collaboration among Han Chinese teachers and Indigenous specialists. Through expertise exchanges, Han Chinese teachers could receive cultural knowledge and skill from Indigenous specialists, and Indigenous specialists could learn from Han Chinese teachers about teaching methods and students' learning styles.

By contrast, the city classrooms were more culturally diverse, containing a lower proportion of Indigenous students. There were no policies or programs specifically providing Indigenous students with opportunities to learn about their culture. Possibly, the reasons were the small population of Indigenous students and the lack of support from Indigenous parents. In that context, the participating teacher's methods showed characteristics of critical-pedagogy model. Ms. Kao was aware of her personal bias and of the discrimination in her classroom, but she sought to instill respect and cross-cultural understanding among the students—and for herself, as well. This study's findings suggest teacher education curricula to embed and link the model of critical pedagogy for teachers working in culturally diverse populations. That would provide a theoretical foundation and methodology for teachers to develop pedagogical practices responsive to the issue of diversity and affirm and advocate cultural diversity (Nieto, 1992).

School administrators in city schools can promote experience sharing and learning among teachers, in order to help them develop teaching activities that accommodate the minority without disaffecting the majority. Ms. Kao used some strategies in her classroom, such as encouraging experience-sharing for students of all backgrounds, inviting Indigenous parents to the classroom to discuss their specialties, and providing time for students to use and to teach their mother languages, to visit Indigenous cultures, and to prepare and present reports on various aspects of life in their cultures. Those strategies helped the teacher affirm and advocate students' linguistic and cultural background, as well as promote multicultural understanding among students.

Moreover, schools and teachers need to receive Indigenous parents' support for the school policies and programs designed for Indigenous students to learn their languages and culture in city schools. Each principal should inform parents of the school's commitment to and strategies for helping their children understand themselves and becoming proud of themselves and their culture. Teachers could introduce programs to help parents understand the effect of the cultural and language education for their children. Parents should be encouraged to realize that their children would learn more, not less, because they would be learning two cultures and two languages. Parents might become alarmed that they were facing the risk of language loss and inevitable cultural destruction if their children did not learn their culture and languages. By introducing parents to the school's commitment and mission and to efforts to improve their children's learning and development, parents



would have a deeper understanding of what their children will learn, and they will have more opportunities to support the school's policies and programs.

### *Implications for Future Research*

This study explores three teachers' beliefs, knowledge, practices, and experiences related to teaching Indigenous students in three different cultural contexts. Findings from this research provide insights into unexplored avenues of research about teaching Indigenous students. Because of the study's limitations, future studies would no doubt refine our conceptions about teaching Indigenous students. This section examines possible directions for future research.

First, the participating teachers in this study were identified as successful, based on opinions of the superintendent in the Taitung Education Bureau, the university faculty in Taitung University, and principals and administrators at Taitung elementary schools. Neither the parents nor the students were involved in the selection process. Parents' or students' views about successful teachers might well differ from those of administrators. For example, Ladson-Billings (1994) found that parents expressed criteria for successful teachers that differed from the conventional notions of leading students to attain high academic achievement. They preferred teachers who helped their children maintain a positive identification with their own culture. Therefore, this study suggests that future research include parents and/or students in the selection of exemplary teachers. The recipients of teachers' services should, clearly, have a significant voice in the evaluation and recognition of the teachers' success.

To minimize the probability that racial differences among the teachers would impact the inter-cultural context that was key to this study, only Han Chinese teachers were selected to participate. Some researchers have found that a teacher's cultural background is a significant factor in his or her beliefs about and teaching for diversity (Chen, 1998; Chen et al., 1997; Chou, 2005; Lipman, 1998; Montero-Sieburth, 1996). For example, Lipman (1998) found that African-American teachers held more positive beliefs about black students' learning, as well as higher expectations of black students than white teachers. In the course of this study, an Indigenous teacher, who was on the list of recommended participants and served as a peer debriefer, reported that she disagreed with opinions of her Han Chinese colleagues. She held a positive opinion toward Indigenous students, their parents, and their community. Future research could well select exemplary Indigenous teachers as research subjects. Comparing and contrasting their pedagogical practices with those of this study would provide a different and valuable perspective of effective teaching for Indigenous students.

This study provides a conceptual framework for teacher educators and school administrators to prepare teachers to teach Indigenous students in various cultural contexts. The framework was based on the study's findings, as well as referenced professional literature on culturally relevant teaching and critical pedagogy. However, this study was based on only three female first-grade and fifth-grade teachers in three school settings, teaching Chinese and mathematics. The findings of this exploratory study apply to those particular teachers within three unique settings and may not transfer, in whole, to other contexts or other teachers (Merriam, 1998). Studying

exemplary teachers with different characteristics, such as age, gender, race, fields of expertise, and in other Indigenous, suburban, and rural settings would produce valuable contributions to a database of effective practices for teaching Indigenous students, and it would contribute to a continuing examination and refinement of the pedagogical theories and the conceptual framework in this study.

### Conclusion

This study began with the personal reflection of my experiences as a Taiwanese elementary teacher of Indigenous students. I became aware that aspects of my teaching might actually be harmful to Indigenous students, and that I did not know how to develop effective teaching methods to meet their learning needs. That teaching experience led me to question the ability of teachers to deal effectively with cultural diversity in their classrooms. Searching for solutions, I launched my study, exploring exemplary teachers' experiences, in order to document and disseminate examples of excellence and models for emulation.

Findings from my study produced some discordant results. On one hand, they confirmed some of what was already described in the literature as effective teaching of minority students. Teachers in this study knew their individual students' abilities, learning styles, peer relationships, and family backgrounds. They were confident of themselves and of each student's ability to learn. Guided by their beliefs and knowledge, the teachers' actions demonstrated that they were care givers who encouraged students to develop their potential, who taught children in a manner fashioned to their experiences and interests, and who created safe environments to foster their intellectual, social, and emotional development.

On the other hand, findings pointed to several examples of the teachers' negative thinking and of assimilation strategies that were incongruent with the literature. The teachers tended to attribute Indigenous students' low achievement to their families and the students themselves, but rarely considered pedagogical variables that might cause the failure of their Indigenous students. The teachers relied upon a low-level curriculum and remedial- teaching methods for the low-achieving Indigenous students, imposed their own values on students, and deprecated Indigenous parents and community life. The importance of social-class reproduction and a capital-based culture was imbedded in the everyday school experiences of the Indigenous students.

This study also found that teachers with different cultural contexts manifested distinctive teaching characteristics. Teachers who taught in Indigenous schools with a majority of Indigenous students, taught in a more culturally responsive manner. They made meaningful connections with students' culture and life experiences to improve their comprehension and academic skills. They understood Indigenous families' wretched living conditions and provided out-of-school care for their students and their families. The participating teacher who taught in the city, in a culturally diverse classroom with fewer Indigenous students, exhibited teaching practices that were more congruent with critical pedagogy. She was aware of biases held by her students and herself, and she emphasized students' development of empathy and tolerance. She valued cultural diversity and organized a democratic classroom in which students contributed their opinions and experiences and learned from one another.

Strong implications from the findings are that preservice and in-service teacher education have not adequately prepared teachers to teach Indigenous students. All three participating teachers relied on other support—their own experiences, their memorable teachers' styles, and their accumulated teaching experiences—to develop their teaching expertise. Moreover, findings indicated that the teachers' work was constrained by time limitations for teaching and for curriculum design and by a conservative school culture that restricted instructional innovation. On the other hand, teaching Indigenous students was supported by a collaborative school culture and by a school policy that valued Indigenous cultural development.

Based on the research findings, this study suggests a conceptual framework for teacher education and school administration to prepare teachers to teach Indigenous students in various cultural contexts. The framework contains a compilation of new findings from this study, as well as a modification of the two most relevant teaching approaches—culturally relevant teaching and critical pedagogy. The framework consists of four components. First, teacher educators and school administrators should prepare teachers to be reflective inquirers. They should provide a venue for teachers to discover and uproot their hidden prejudices and beliefs about Indigenous culture and about their teaching practices that might impede Indigenous students' learning. Second, teacher educators and school administrators should prepare teachers to be culturally responsive educators. They should provide the theoretical and practical knowledge and skills needed to teach Indigenous students. Third, teacher educators and school administrators should prepare teachers to be change agents. They should create school environments that support personal and professional improvements that

will improve the teaching of Indigenous students. Fourth, teacher educators and school administrators should consider cultural contexts when preparing teachers to teach Indigenous students. Culturally relevant teaching might well be suitable for educators who work in the Indigenous areas. Critical pedagogy, in turn, might well meet the needs of teachers who work with diverse populations of students in large urban schools.

This study also suggests directions for future research, extending the boundaries of this study. It recommends research on parents' and students' perspectives of exemplary-teacher nominations and on the selection of exemplary teachers from different backgrounds, such as Indigenous teachers, male teachers, and teachers of different grade levels, subjects, and cultural contexts. Future research should also examine and expand the pedagogical theories and refine the conceptual framework of this study. Moreover, it will broaden and deepen the current understanding of effective teaching for Indigenous students in Taiwan and beyond.

On concluding this education odyssey, researching exemplary teaching, I have discovered much impairment to excellence in education. More importantly, I have found many ideas and tools for scaling the barriers. Because of this study, I have become more aware of problems in my teaching and have begun to more systematically search for solutions to the problems. I have gained a broader understanding of how successful teachers acquire and use necessary beliefs and knowledge, as well as effective, alternative classroom skills to meet the needs of culturally diverse students, and the personal traits to deal with innumerable factors that affect their teaching. I have come to better realize that, as educators, we have a

moral duty to instill knowledge of cultural diversity, erase misconceptions, and model tolerance for diverse students. I have endeavored to emphasize the need and obligation to prepare teachers to reflect upon and look behind their beliefs and to look forward to find new ways of thinking about and teaching children who are different from themselves. Armed with theoretical and practical findings, and experienced with organizing and presenting findings, I plan to continue my campaign on behalf of my Indigenous countrymen, both in the classroom and in the various other educational venues to which I may subsequently have access.

## APPENDICES

### APPENDIX A: Teacher Nomination Form

Please identify the teacher whom you believe to be most effective in teaching Indigenous children and provide the following information, if applicable.

Teacher Name		Race	
Teacher's Current School		Gender	
Years of Teaching		Age	
Teaching years in current school		Teaching grade level	

Please explain why you believe this teacher as exemplary in teaching Indigenous students.

Thank you very much.



## APPENDIX B: Teacher Consent Form

Identification of Project	Teaching Taiwanese Indigenous Students: Case Studies of Three Han Chinese Teachers
Statement of Age of Subject	I state that I am over 18 years of age and wish to participate in a study being conducted by Shu-Huei Yen of Principal Investigator in the Department of Curriculum and Instruction at the University of Maryland, College Park.
Purpose	I understand that the purpose of this research is to gain information about my experiences in teaching Mandarin and mathematics to Indigenous students. My beliefs about, knowledge of, and approach toward teaching Indigenous students will be explored in my school context.
Procedures	I know that this study will be conducted over several months. The researcher will observe my teaching approximately six to eight days from March to June 2005. The researcher will audiotape my teaching and make field notes during her observation. Before and after each day of observations, the researcher will have conversations about my instructional practices with me and audiotape these conversations. The researcher will have three formal interviews with me. The first interview is to understand my personal beliefs and experiences in teaching Indigenous students, for example, how do you see your role in teaching Indigenous students? The second interview is to understand my teaching practice of Indigenous students, for example, what strategies do you use to facilitate increased academic success of Indigenous students? The third interview is to understand the contextual factors that constrain or support my work with Indigenous students, for example, how does your school support your teaching for Indigenous students. Each formal interview will be approximately one hour in length and will be audiotaped. Additionally, the researcher will collect the information and materials regarding my classroom instruction and school context.
Confidentiality	I understand that the researcher will use pseudonyms for my identity and my school and that all information collected in this study is confidential. The researcher will discuss the field notes and the transcriptions of interviews with me. The researchers will give me a copy of the transcript. At the end of this study, the researcher will give me a draft of the manuscript. I know that all the audiotapes and documents will be stored in a filing cabinet in the researcher's home office for five years and that the researcher is the only person who can access to all the tapes and documents. After five years, all the tapes will be destroyed and all the documents will be shredded.

Benefits	The benefits for my participation include the opportunity to have greater understanding of my teaching practice and increase knowledge about the teaching of Indigenous students.
Risks, Freedom to Withdraw, & Ability to Ask Questions	<p>It is my understanding that the risks of participation in this study are minimal. I may feel some anxiety or discomfort during observation or interview. The researcher ensures me that no data will be used for personnel evaluation and that all data will be analyzed for the research purpose only. The researcher will not disturb the regular routine and activities in my classroom during her observation. The researcher will give me the opportunity to omit responses to questions that may cause discomfort. I understand that I have the right to terminate recording my practices and interviews at any time. I have right to refuse to answer any specific questions, to refuse the taping of the interviews or observations, or to give any information of the documents at any time. I understand that I am free to ask questions or to withdraw from participation at any time and without penalty. I understand that if I choose to withdraw, this will not have any negative impact on my relationships with the researcher, the administrators, or anyone else involved in this study.</p> <p>I have read and understand the explanation provided to me. I have had all my questions answered to my satisfaction, and I voluntarily agree to participate in this study. I have been given a copy of this consent form.</p>
Contact Information of Investigators	<p>I know that if I have any questions or concerns regarding my participation in the study, I can contact: Faculty Advisor, Dr. Linda Valli, Department of Curriculum &amp; Instruction, 2311 Benjamin Building, University of Maryland, College Park, MD 20742, Phone: 301/405-7924, email: <a href="mailto:LRV@umd.edu">LRV@umd.edu</a></p> <p>I can also contact: Researcher, Shu-Huei Yen, Taitung City, Taitung County, Taiwan 236. Phone: (089) 346883. Email: <a href="mailto:shyen332@umd.edu">shyen332@umd.edu</a></p>
Contact Information of Institutional Review Board	I know that if I have questions about my rights as a research subject or wish to report a research-related inquiry, I can contact: Institutional Review Board Office, University of Maryland, College Park, Maryland, 20742; (e-mail) <a href="mailto:irb@deans.umd.edu">irb@deans.umd.edu</a> ; (telephone) 301-405-4212

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Name	Signature	Date

## APPENDIX C: Interview Protocol

### First Interview

1. Describe your personal background (race, family background, educational background, and teaching years).
2. How many years have you taught in this area and this school? In what other areas and schools have you taught before? What are the differences among them?
3. Why did you decide to become a teacher?
4. How do you see your role as a teacher?
5. How do you see your role in teaching Indigenous students?
6. What experiences have shaped your views?
7. Share your successful teaching experiences for teaching Indigenous students. What difficulties do you have when you teach them? How do you deal with these difficulties?
8. How do you know how to teach Indigenous students? How much of what you know about teaching for cultural diversity is a result of teacher preparation or professional development?

### Second Interview

#### *Questions Related to Indigenous Students*

1. Describe your Indigenous students (Numbers, race, gender, family background, and achievement).
2. What are the characteristics that Indigenous students bring to your classroom? Are there differences between the learning of Indigenous students and Han Chinese students?
3. What are the factors that support or constrain Indigenous students' learning?
4. What role do you believe Indigenous parents play in the academic failure or success of Indigenous students?

#### *Questions Related to Teaching*

1. What are the educational objectives in your teaching of Indigenous students? How do you know that you reach the goals?

2. What do you think of the curriculum used for teaching Indigenous students?
3. What strategies do you use to facilitate increased academic success of Indigenous students?
4. What expectations do you have for Indigenous students?
5. What kinds of relationship do you want to build with your Indigenous students?
6. How do you manage your classroom? Are any special considerations needed for Indigenous students?

*Questions Related to Parents*

1. What methods do you use to help you get to know your Indigenous students and families?
2. Please describe your relationship with the parents of Indigenous students.
3. How do you communicate and interact with Indigenous parents?
4. Are there any failures or frustrations when you interact with Indigenous parents? Are there any language barriers? How do you cope with these?

Third Interview

1. What encouraged you to teach culturally-diverse students [Indigenous students]? What sustains you?
2. How do you improve your instruction for culturally-diverse students [Indigenous students]? What motivates you make such changes?
3. How does your school support your teaching for culturally-diverse students [Indigenous students]?
4. What constraints have you found in teaching for culturally-diverse students [Indigenous students] in your school? How do you deal with those constraints?
5. What kind of learning environment does your school provide that contributes to or constrains Indigenous students' learning?
6. What suggestions do you have for teachers, for teacher educators to prepare teachers, and for school administrators to help teachers to be more effective with Indigenous students?

## APPENDIX D: Pre- and Post- Observation Questions

### Pre-observation Questions

1. What are the goals for the lesson I will observe?
2. How familiar are students with the topic?
3. How do you plan for the lesson?
4. What factors influence your lesson plan?
5. What resources will be used?

### Post observation Questions

1. Tell me about the class instruction. Why did you use these teaching strategies?
2. What was the most important thing for students to learn in this lesson? How do you know that you reached your goals?
3. What are the most important decisions you made during today's lesson?
4. Can you think of some concept from today's lesson that your Indigenous students would have difficulty understanding? What was the concept and how did you help them understand it? If none in today's lessons, are there any difficulties in past lessons?
5. [If any, describe a scenario related to teachers' teaching of Indigenous students or Indigenous students' learning observed during the class and ask teacher's response on what was happening.] What was going on in the class, what worked, or what did not work? What do you think about it and what would you do differently?
6. What did you learn about teaching Indigenous students during this lesson that you will use to plan future lessons?

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